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T H E
CHIRURGICAL WORKS
O F
PERCIVALL POTT, F. R. S.

Surgeon to St. BARTHOLOMEW'S
HOSPITAL.

V O L. II.

C O N T A I N I N G

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| I. Observations on that Disorder of the Corner of the Eye, commonly called FI-STULA LACHRYMALIS. | II. Remarks on the Disease, commonly called, a FI-STULA IN ANO. |
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L O N D O N :

Printed for L. HAWES, W. CLARKE, and R. COLLINS,
at No. 32, in *Pater-noster Row*.

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OBSERVATIONS

ON THAT


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OF THE

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COMMONLY CALLED

Fistula Lachrymalis.



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CORNER of the EYE,

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Fistula Lachrymalis.

By *PERCIVALL POTT*,
Senior SURGEON to *St. Bartholomew's Hospital.*

*Neque enim credunt posse eum scire quomodo morbos curare
conveniat, qui unde hi sint ignoret; eum vero recte curaturum,
quem prima origo causæ non fefellerit.*

A. CORN. CELSUS.

The FOURTH EDITION, improved.

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Printed for HAWES, CLARKE and COLLINS, in Pater-
noster Row. M.DCC.LXXII.

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T H E
P R E F A C E.

BY frequently conversing with some of that part of the profession who come to London to attend the Hospitals, and to improve themselves in the Art of Surgery, it has appeared to me that the *FISTULA LACHRYMALIS*, though a very common disease, is one with which many of them are very little acquainted, either with regard to its cause, seat, or method of cure. Some are totally ignorant of every thing

thing relating to it, others who have an imperfect idea of its nature, and seat, are yet much at a loss how to vary the method of treating it according to its different states and circumstances ; upon which distinction the probability of a cure does often in great measure depend ; for if those means which are only proper in one state of the disease are used in another, the patient will be fatigued to no purpose, and the surgeon by being frequently disappointed will be inclined to think those cases incurable, which have only failed through his own mismanagement.

There is hardly any chirurgical disorder which requires a more close
regard

regard to all its appearances and variations than this does ; and whoever expects to conduct it successfully, must attend to it constantly : this is, perhaps, the great reason why it is so little understood ; the object is too minute, and the process often too long to engage the attention ; besides which, it hardly comes under the name of an operation, the great and almost only object which they who come hither from the distant countries have in view ; the operative part of surgery is what they have seen the least of, and therefore they are the more desirous of becoming acquainted with it : this desire is a very laudable one, and ought certainly to be encouraged,

ged, but still the operative part of surgery is far from being the whole of it ; and I cannot help thinking, that by attending a little more to what is called common or practical surgery, our art might still be considerably improved, practitioners rendered more expert, and mankind much benefited.

The merely curing diseases is not all ; that was done (sooner or later) while surgery and anatomy were in their most imperfect state, and while every branch of medicine laboured under many inconveniencies which are now happily removed ; but the different methods in which surgical disorders are treated, or their

cures

cures attempted, will make so considerable a difference in the confinement and sufferings of the patient, as to be very well worth attending to.

It may possibly be thought foreign to my present purpose, but I cannot omit this opportunity of adding a few words on a subject which appears to me highly deserving of some notice, as its influence may be very extensive and very prejudicial; it is the false idea which the by-standers at an operation generally have of chirurgic dexterity; to which word they annex no other idea than that of quickness. This has produced a most absurd custom of measuring the motion of a surgeon's

geon's hand, as jockeys do that of the feet of a horse, viz. by a stop-watch ; a practice which though it may perhaps have been encouraged by operators themselves, must have been productive of most mischievous consequences. *Tute et celeriter* are both very proper characteristics of a good chirurgic operation ; but *tute* stands as it should do, in the first place, as the patient who suffers the smallest injury from the hurry of his operator has no recompence from the reputation which the latter obtains from the by-standers. In most of the capital operations unforeseen circumstances will sometimes occur, and must be attended to ; and he, who without giving

unneces-

unnecessary pain from delay, finishes what he has to do in the most perfect manner, and the most likely to conduce to his patient's safety, is the best operator.

I have endeavoured to make the following tract as plain and as intelligible as I can ; and if it should appear prolix to those who are already acquainted with the subject, I must beg leave to observe, that it was not written for their information ; but if any of those who were unacquainted with it before should from hence gain any useful knowledge, my end will be answered, and I shall be very much pleased.



FISTULA LACHRYMALIS.

S E C T. I.

THE antient writers were in general so little acquainted with the anatomical structure of the parts concerned in this disease, that both its cause, and seat, have been very erroneously represented by most of them; other disorders, very different both from this and from each other, have been confounded under the same general appellation, and the means made use of toward obtaining a cure, being adapted to such misconceptions, were rough, painful, and most commonly ineffectual.

The fluid which perpetually moistens the eye, was supposed to be secreted by that
small

small eminence in the inner angle, now called the caruncle, and to flow from thence upward through the puncta lachrymalia*. The caruncle was by many thought to be the seat of the disease in question, which was said to be produced, either by a defluxion from the brain † on this part, or by an abscess formed within the body of it; or by a lodgment of the tears, become acrid and corrosive in consequence of such stag-

* Fallopius, who has very accurately described the puncta lachrymalia, sacculus, and duct, as well as the disease, has yet fallen into this common error. “ Ad
 “ oculos ipsos ex faucibus egrediens venio, in quibus
 “ primum prætermisere anatomici duo foramina parva
 “ in angulo interna posita, quarum unum est in palpe-
 “ brâ superiori, alterum in inferiori, in viventibus ad-
 “ huc hominibus, si quis inspicere voluerit apparen-
 “ tia, quæ foramina habent meatus qui sub caruncula
 “ encanthidos vel epicanthidos dicta uniuntur in quen-
 “ dam communem sinum in narium cavitatem desinen-
 “ tem per canalem proprium in osse squamoso, quod
 “ internum angulum occupat insculptum.

“ Per hos meatus major lachrymarum pars ut ego in
 “ flebus mulierum observavi, ad oculos emanat.”

FALLOPIUS.

Non enim os solummodo cariosum, verum etiam glandula ita erosa erat, ut quotiescunque puer ploraret lachrymæ per ipsam fistulam copiosè extillarent.

HILDANUS.

† Fistula lachrymalis fit ex humorum decursu, qui currunt ad lachrymalis angulum juxta nasum, nec propter eorum multitudinem, et grossitatem possunt exire, &c. hi autem morantes ibi diutius corrumpuntur, et locum ulcerant. LANFRANC.

Ægy-

stagnation ‡ ; while others looked upon it as a kind of encysted tumor. The swelling in the inner corner of the eye, the frequently-attendant ophthalmia, the involuntary flux of serum down the cheek, the excoriation of the eye-lid, and the discoloured discharge upon pressure, strengthened their opinions, and confirmed their prejudices.

They who supposed it to be caused originally by a defluxion of the inflammatory kind, tending to produce an abscess, had recourse at first to those general methods and means which were thought most likely to prevent such consequence : these not answering, they proceeded to open the supposed

Ægylops est tumor abcessorius inter majorem angulum, et nares proveniens. PAULUS.

‡ At the great corner of the eye there is a glandule made for receiving and containing the moisture which serves for lubricating the eye ; this glandule sometimes, by a sanguine or pituitous defluxion falling violently from the brain, swells and impostumates and ulcerates, &c. AMB. PAREY.

Hæc caruncula ab acrium humorum affluxu turget nonnunquam intumescit, et abscedit ulceraturque, ulcere non raro in fistulam abeunte, adeo ut subjectum os corrumpatur. MUNNICKS.

Per pusillum utriusque palpebræ foramen lachrymæ naturaliter effluunt. FAB. AB AQUAPENDENTE.

Lachrymæ veniunt per lachrymalia a foramine quodam parvo, et quasi insensibili in fine pilorum. GUIDO.

posed abscess, and to endeavour the digestion of it; on the other hand, they who supposed it to be an encysted tumor attempted the eradication of it either by knife, caustic, or cautery; and all of them taking it for granted when the discharge was apparently purulent, or much discoloured, that the bone was rotten, advise the use of escharotic applications, or the hot iron to destroy the callosity, and to dry and exfoliate the caries; and these methods failing, as in the nature of things they very frequently must, they pronounced the disease to be incurable.

A more minute and careful examination into the anatomy of the parts has given us a more true idea of the disorder, and furnished us with a more rational, as well as a more successful method of treating it. We now know that the caruncle is not the organ which secretes the tears, but that this office is performed by a gland, situated near the outer corner of the eye; that the lachrymal fluid is in its nature perfectly innoxious; that an obstruction in the nasal duct is most frequently the primary and original cause of the complaint; and that its seat is in the sacculus lachrymalis.

Upon

Upon these principles the modern practitioners have, with great industry and ingenuity, endeavoured to find out some means, whereby this obstruction may be removed, and the parts restored to their natural and healthy state, without such pain, destruction, and deformity, as the antient methods occasioned; or, these failing, to establish a new artificial passage, which may in some measure supply the place of the natural one.

All these means have the merit of being founded on the natural structure of the parts concerned: when the more easy, and mild ones succeed, the patient gains a considerable advantage; and when they do not, little time is lost, nor is any more efficacious method rendered thereby less practicable: in this, as in every other part of surgery, the more simple means ought to be first tried; pain should be avoided as much as possible, except when absolutely necessary, and then it must be submitted to.

S E C T. II.

THAT the motions of the eye-lids may be performed with the utmost ease, that the tunica cornea may be kept constantly clean, bright, and fit for the transmission of the rays of light, and that dust, and other hurtful particles, may be immediately washed away, the surface of the eye is continually moistened by a fine limpid fluid.

This fluid is derived principally from a large gland, situated under the upper edge of the orbit, near the outward corner of the eye, which gland is of the conglomerate kind, and lies in a small depression of the os frontis; its excretory ducts, or those by which it discharges the secreted fluid, piercing the tunica conjunctiva, just above the cartilaginous borders of the upper eye-lids.

While the caruncle was thought to be the secretory organ of the tears, this gland bore the title of glandula inominata; but now that its use and office are known, it is called glandula lachrymalis.

By

By irritation from any sharp or poignant particles, a large quantity of this fluid is immediately secreted, and by the motion of the eye-lids is as immediately derived over the surface of the eye, by which means such particles are washed and wiped off. Sometimes also the passions of the mind produce an immediate increase of this lymph, which is then strictly and properly called tears; a constant secretion of too large a quantity causes a disease, called epiphora; and a deficiency of it makes the motions of the lid difficult and painful.

Altho' the fluid secreted by the lachrymal gland is considerable in quantity, yet, when it is not suddenly produced by irritation from without, or passion within, it is so constantly and gradually carried off, as to create neither trouble, uneasiness, nor blemish.

The edge, or border of each eye-lid, is formed by a thin cartilage, the figure and consistence of which keep the lids properly expanded; these cartilages are covered by a fine membrane, and are called cilia; their internal edges do, upon every motion, sweep over every point of the surface of the cornea; this motion, tho' almost imperceptible,

tible, unless attended to, is very frequently performed, and as the secretion of the fluid is also constant, the eye is by this means kept always moist, clean, and bright.

At the extremity of each of these cartilaginous borders of the eye-lids, on the side next the nose, is a small papilla, or eminence ; and in the middle of each of these is a small hole, or perforation, which being made in the cartilage is not liable to collapse while the parts are in a sound state, but remains always open ; they are called the puncta lachrymalia, and their office is to receive the lachrymal fluid, as it runs off the cornea along the edges of the eye-lids, thereby preventing it from trickling down the cheek ; and that there may be no impediment to the constant execution of this office, during the time of sleep, as well as that of being awake, the internal edges of the cilia do not come into immediate contact with each other in that point where these orifices are.

From each of these puncta lachrymalia proceeds a small membranous tube, which tubes soon enter into, or form a pouch or bag, situated near the inner angle of the eye, just below the union of the two lids,
under

under the musculus orbicularis palpebrarum; the bag is called the sacculus lachrymalis, and its office is to receive all the lymph brought by the puncta and ducts: the upper part of this sacculus lies in an excavation, formed partly by the nasal process of the os maxillare superius, and partly by the os unguis; the lower part of it is confined in a long channel, and forms a tube, or duct, which descending obliquely backward, communicates with the cavity of the nose, behind the os spongiosum superius, by an opening whose size is somewhat different in different subjects.

This passage is called the ductus ad nares, or the ductus nasalis, and thro' it whatever is received by the sacculus from the puncta does, in a healthy and sound state of these parts, pass into the nose.

The membrane which lines this sacculus and duct, is in its structure much like to the membrana pituitaria narium, from the surface of which a clear viscid mucus is secreted, and by which the sacculus and passages are constantly moistened and kept pervious.

While the parts are in a healthy, sound state, the fluid secreted by the lachrymal gland passes off thro' the puncta, sacculus,

and duct into the nose, without any trouble, but when they are in a diseased state the case is otherwise ; this membrane, like all other vascular parts, is liable to inflammation, by which means it often happens, that it is so thickened as to obstruct the nasal duct, and thereby much impede, or totally hinder the passage of any thing thro' it ; in consequence of which obstruction the sacculus is filled by its natural mucus, and the derivation of the serum from the lachrymal gland thro' it being thus prevented, it runs off from the eye-lid down the cheek : this obstruction continuing, and the mucus still lodging, the sacculus is dilated, and produces that tumor in the inner corner of the eye, and that discharge, upon pressure, which characterize the first state of the disease in question, and in conjunction with several other attending symptoms, prove its seat to be in the lachrymal sac, and nasal duct.

S E C T.

S E C T. III.

ALTHO' the seat of this disease is the same in almost every subject, yet its appearance is very different in different persons, and under different circumstances : these variations depend principally on---

1. The degree of obstruction in the nasal duct.

2. The state of the cellular membrane covering the sac.

3. The state of the sacculus itself.

4. That of the bone underneath.

5. The general state and habit of the patient *.

Sometimes a serous kind of defluxion, by which the lining of the sac and duct are so thickened as to obstruct, or prevent the passage of the fluid through them into the nose, makes the whole complaint and the cellular membrane on the outside not being diseased, there is no appearance of inflammation ; in this case the duct is stopped, and the sacculus dilated, but without any alteration in the colour of the skin, a fulness

B 4

appears

* As the state and circumstances of this disease are really various, and differ very essentially from each other, the general custom of calling them all by the one name of fistula lachrymalis is absurd.

appears in the corner of the eye next to the nose, and upon the application of a finger to this tumor, a clear viscid mucus is discharged thro' the puncta lachrymalia, the patient feels no pain, nor finds any inconvenience, except what is produced by the discharge of this mucus, and by the trickling of the lymph down the cheek.

In some cases the mucus is not perfectly and always clear, but is sometimes cloudy, and looks as if it had a mixture of milk or cream in it, at first waking some of it is generally found in the corner of the eye, and the eye-lashes being smeared over with it during sleep, most commonly adhere together in the morning.

This is the most simple state of the disease, what the French have called the hernia, or hydrophs sacculi lachrymalis; it is frequently met with in children who have been rickety, or are subject to glandular obstructions; and in this state it sometimes remains for some years, subject to little alterations, as the health or habit shall happen to vary, the sacculus being sometimes more, sometimes less full, and troublesome, the mucus which is pressed out sometimes more, sometimes less cloudy, and now and then attended

ded with a slight ophthalmy, or an inflammation of the eye-lids, but which, by common care, is easily removed.

If the facculus is not much dilated, the discharge small, and produced only by pressure, the chief inconveniencies are the weeping eye, and the gumming together of the lids, after sleeping ; but these, by being attended to, may be kept from being very troublesome, and if the disease makes no farther progress, may be so regulated as to render any more painful process totally unnecessary.

If the dilatation is considerable, the swelling is more visible, and the quantity of mucus is larger ; it is also in this state more frequently mixt and cloudy, and more troublesome, from the more frequent necessity of emptying the bag ; but if the patient be adult, it may, even in this more dilated state of it, be kept from being very inconvenient.

If an inflammation comes on, the tumor is thereby considerably increased, the discharge is larger, as well during sleep, as upon pressure, the skin covering it loses its natural whiteness and softness, becomes hard, and acquires an inflamed redness, and with
the

the mucus a mixture of something, which in colour resembles matter, is discharged, especially if the pressure be made with any force, or continued for any time: this circumstance, added to the painful sensation, and inflamed appearance of the parts, has been productive of a supposition, that in this state there is either an ulcer, or an abscess within the sacculus or duct.

As this is an opinion, which tho' it may possibly sometimes have some foundation in truth, yet is in general entertained much too hastily, and is also the principal source whence most of the mistakes concerning this disease have sprung, I would beg leave to be indulged a few words on this subject.

It has already been observed, that from the surface of the membrane which lines these parts, a thin mucus is secreted, by which its surface is smeared over, in the same manner as is that of all the membrane which covers or lines the fauces, larynx, and internal parts of the nose, the antra of the jaws, and the sinuses of the sphenoid and ethmoid bones, &c. While the lachrymal sac is free from disease, and the ductus ad nares open, this mucus is nearly limpid in colour, small in quantity,
and

and passes insensibly into the nose with the fluid from the lachrymal gland ; but when, by the obstruction of the nasal duct, that passage is denied, it necessarily lodges in the sacculus, by distending and irritating its containing bag it is increased in quantity, altered in colour, and discharged at the puncta lachrymalia, as it either becomes too much for the sac to contain, or as it is forced out by pressure. This is a short and succinct account of the true nature of the disease, and such as will fairly and truly account for all its symptoms and appearances, without any recourse to either abscess or ulcer, circumstances which very seldom, if ever, attend it.

That which is mixed with the clearer part of the mucus, and which from its pale yellow hue is taken for matter, is not matter, but mucus, which in this part, as well as several others in the body, does, either by being confined beyond the necessary time, or by inflammation, or irritation of the gland or membrane which secretes, or contains it, or even from general affection of the habit, put on a yellow, purulent colour, where there is neither abscess, nor ulcer in the part whence it comes.

So many instances of this are producible as to put the matter beyond all doubt, the urethra, vagina, and all the sinuses of the head which communicate with the nose, furnish us with them daily; the linings of all these are constantly imbued with a mucus naturally clear, and no more in quantity, than is necessary to keep the membranes moist, but either inflammation or irritation does immediately so add to its quantity, and so alter its colour, that in the two former, the same mistake has often been made as in the subject in question, that is, the discharge has been thought to be purulent, and produced by ulceration of the parts.

These two fluids pus and mucus, which have been so frequently confounded together, do really differ so widely from each other in their nature, constitution, sources, purposes, and effects, that to distinguish them properly, and to point out the true character of each, seems to be a matter of much importance; it would carry me too wide from my present purpose to attempt it in this place, and therefore I shall only just mention what may serve merely to illustrate that.

If I conceive rightly of this affair, mucus, considered in a general sense, is the effect of a natural secretion made by glands, membranes, or other bodies appointed for that purpose, and is so far from being originally the consequence of disease, that, in a due quantity, it is absolutely necessary for several very important purposes in the animal œconomy, which purposes, when this fluid is deficient, must be ill-executed, and some kind of disease, or defect follow: whoever will reflect upon the uses of it in the intestines, joints, sheaths, or capsulæ, of the tendons, in the sinuses of the skull serving the purposes of speech, in the cavity of the nose, where the olfactory nerves do their duty, in the prostate gland, larynx, trachea, urethra, and vagina, will be easily convinced of the truth of this assertion, both with regard to its natural uses in a healthy state and proper quantity, and the share it frequently has in the production of diseases, when it is either vitiated or redundant.

Pus, or matter, is certainly no natural secretion; suppuration, tho' it is an act of nature when some parts of the body have been forcibly divided from each other, is nevertheless

theless to be regarded as the effect of violence and destruction, at least of division; for, without entering minutely into the origin or nature of it, I believe, I may venture to affirm, that the dissolution of some of the solid particles of broken capillary vessels, and a mixture of some part of the juices which should circulate thro' them, make a necessary part of its production; however constant its appearance may be in the progress toward healing a wound, or sore, yet it never is produced, even in the smallest quantity, without some degree of erosion, some breach in the natural structure of the parts; and when such breach is healed the discharge necessarily ceases.

On the contrary, mucus may by irritation, relaxation, or defluxion, on its secreting or containing parts or organs, be increased to a quantity far beyond what is necessary or useful, and produce thereby a disease in parts where there is not the least degree of solution of continuity, as in the cases of tenesmus, stone in the bladder, fluor albus, and simple gleet from the urethra; as also in that kind of defluxion on the nose and fauces, producing a catarrh, and in the immediate effect of all sternutatories.

Other

Other differences between the nature and properties of the two fluids might be mentioned, but if these already cited are just, they will be sufficient to evince the impropriety of confounding them together, either with regard to theory or practice.

Nor is this mistake of discoloured mucus for matter confined to the lachrymal sac only; the two circumstances of pain, and yellow colour, having, in almost all times produced the same misconception in the virulent gonorrhea of both sexes; this has been called pus, and being said to proceed from ulcerations in the urethra and vagina, though the repeated testimony of those who have, immediately after death, examined the parts of persons so diseased, has often been produced to the contrary, and tho' the discharge itself, when properly examined, will always prove the contrary: inflammation and irritation of the membranous linings of the urethra, and vagina, will fully account for all the appearances in this disease, in which there is neither matter, nor ulcer, nor abscess: whoever will attend to the discharge made from a purulent ulcer, will find it widely different from that which issues from either of the above parts in the gonorrhea.

Again,

Again, in case of strictures in the male urethra, the discharge occasioned by a bougie, properly and judiciously used, is a discoloured mucus, and not matter, tho' it is generally so called; it is from the discharge of this mucus, and the dilatation of the passage, that the relief is obtained, not from any destruction or division of parts; the bougie, which produces true matter, does much more harm than good, makes a sore where there was none, and where there ought to be none; how often do catarrhus defluxions on the trachea, and larynx, wear toward the close a deep purulent colour, so as to deceive the unknowing into an opinion, that it is matter upon the lungs? But no judge of these things ever had recourse to abscesses or ulcers for a solution of such appearance. The argument drawn from the quantity of these discharges is as erroneous as those taken from its colour; as an inflammatory defluxion on the part does generally occasion the latter, so mere irritation will produce the former, which does also generally cease when the irritating cause is removed or appeased: how immediately is a most troublesome tenesmus cured by a glyster of starch and opium? What large fœtid discharges

charges are made from behind the prepuce of many persons, not only free from all venereal taint, but without any ulceration of the parts, by a kind of exsudation? To what length of time will they not continue, if neglected, and how immediately do they cease by the use of a spirituous or vitriolic wash? How often is the fluor albus, even in some of its worst circumstances, moderated, not to say cured, merely by washing away the acrid mucus, which lodging in the rugæ of the vagina, continually irritated the parts to a fresh discharge, and perpetuated the disease? What quantity of slime is there in the urine of those who have a stone in the bladder? And how totally does it cease, upon that stone being discharged, or taken away? Whereas neither cleansing of parts, nor removal of irritating bodies, does, or ever can procure an immediate cessation of a discharge of true matter, which being occasioned by a solution of continuity, an erosion or division of the parts whence it proceeds must decrease gradually, and at last can only cease by such part becoming whole again.

In short, the two fluids are so absolutely different and distinct, that the blending them

together in our ideas of disease, proceeding from, or producing either of them, cannot be too industriously avoided; it is a subject on which a great deal more might be said, as it would comprehend, or have relation to many disorders, which perhaps are not sufficiently understood, or attended to; but being beside my present purpose, I shall say no more about it, only desire, that I may not be misunderstood, as if I meant to assert, that there never is abscess or ulcer in the lachrymal sac, and duct: No, I only mean to signify, that it is my opinion, that the yellow or purulent colour of the discharge, which is generally received as a proof of such, is no proof at all; that this colour may be, and most frequently is, dependent on other causes; that tho' by the suppuration of the cellular membrane covering the sac, the upper part of it sometimes becomes sloughy, and bursts, yet the lower part of it, and the nasal duct, are often at the same time perfectly sound; and that there never is abscess or ulcer within, while the skin is entire and preserves its natural hue, and softness, let the colour of the discharge be ever so yellow; circumstances of no small consequence in the treatment of this disease.

The

The inflammation of the cellular membrane covering the sac, is a circumstance which makes a considerable difference, both in the appearance of the disease, and in its requisite treatment; in some cases it is confined merely to the surface of the tumor in the corner of the eye; in others it spreads still farther, affecting the eye-lids, cheek, and side of the nose.

When the parts are in this state, the mucus within the bag has generally the appearance of being matter, that is, it wears a deep yellow colour, and is of a more thin consistence; if the puncta lachrymalia are naturally large and open, and the inflammation confined to the surface of the sac, its contents will pass off pretty freely, and the skin will remain intire; this is what the ancients called the simple, or imperfect, or anchylops.

But when the skin covering the lachrymal bag has been for some time inflamed, or subject to frequently returning inflammations, it most commonly happens, that the puncta lachrymalia are affected by it, and the fluid not having an opportunity of passing off thro' them, distends the inflamed skin, so that at last it becomes sloughy, and bursts

externally. This is that state of the disease which is called perfect, Aigylops, or Ægylops; the discharge which used to be made thro' the puncta lachrymalia, while the skin was intire, is now made thro' the new opening, and by excoriating the eye-lids and cheek increases the inflammation, and gives the disease a much more disagreeable appearance. In some the matter bursts thro' a small hole, and after it has discharged itself, the tumor subsides, the neighbouring parts become cool, and tho' the skin covering the surface of the sacculus is sloughy and foul, yet there is no reason to believe that the sac itself is much diseased below; in others the breach is large, the skin remains hard and inflamed, and from the appearance of the sore, there is reason to suppose the whole inside of the bag to be in a diseased state; and in some cases, which have been much neglected or irritated by ill-treatment, the cavity of the sacculus seems to be filled with a loose ill-natured fungus, which gleans largely, and produces inflammation and excoriation of all the parts about.

There is also another circumstance which sometimes is found to attend this disorder, viz. a carious state of the bones; this was
by

by our forefathers supposed to be a frequent one, and was the principal reason for their so free use of caustic, cautery, and scalpra, in the treatment of it; but since the disease has been more minutely examined into, this circumstance has been found to be a very rare one. When the fistula lachrymalis is a symptom of the lues venerea, as it sometimes is, the bones are indeed often carious, but then, the fistula is not the original complaint, but produced secondarily, and is a consequence of the diseased state of the os ethmoides, and ossa spongiosa of the nose, and is not curable by any local means or applications, but depends intirely on the cure of the disease, of which it is a symptom.

I have also seen an abscess after the small-pox, which, by falling on the lachrymal bag, has made it all slough away, and leave the bones bare; which circumstance I have also seen attend the free use of strong escharotics applied to destroy what is called the cyst; but without the accession of some other disorder producing it, or the most absurd method of treating the complaint, I believe that a caries of the bones will very seldom be met with. Indeed the combination of other diseases, either of the general habit,

or affecting the same, or the neighbouring parts, does often make a very material difference, both in the appearance of the disorder, in the prognostic, and in the proper method of treating it, which therefore should always be enquired into; for instance, the patient is sometimes subject to an habitual ophthalmia, or lippitudo, which will add to the deformity, and give a good deal of additional trouble during the cure; an ozæna, or some other disease of the membrane, and cells of the ethmoid bone, or a polypose excrescence within the nose, are now and then combined with it; the habit is sometimes, as I have before observed, infected with the lues venerea, of which this disease may be a symptom; strumous glandular obstructions are its too frequent companions, and, what is worst of all, it is sometimes cancerous.

S E C T. IV.

FROM what has been said, I think it will appear that this disease, in its primary and most simple state, consists in a detention or lodgment of mucus in the sacculus lachrymalis, in consequence of an obstruction of the natural passage from that bag

bag into the nose; that by means of this lodgment the sacculus is distended, irritated, and sometimes inflamed; that the fluid which passes from the lachrymal gland over the eye to the puncta lachrymalia, being prevented by the fulness of the sac from getting into it, runs down the cheek, and therefore that the characteristic marks of the disorder, when recent, are a small tumor in the inner corner of the eye, an involuntary flux of serum down that side of the face, and a discharge of mucus thro' the puncta lachrymalia upon pressure.

This lodgment, being originally produced by the stoppage of the natural duct, it follows, that the first curative intention is, the removal of that obstruction; which is sometimes practicable, but more often not; the degree of obstruction, its date, the state of the adjacent parts, and some other circumstances rendering it more or less so in different subjects.

That the inexperienced practitioner may be guarded against giving a hasty prognostic, or making attempts, which however fatiguing to the patient, must in the end prove fruitless; and that he may be enabled to understand the disease more perfectly, I shall

take the liberty to divide it into four general heads, or states, under which all its lesser distinctions may be comprehended.

The first consists in a simple dilatation of the sacculus, and obstruction of the nasal duct, discharging upon pressure, a mucus either quite clear, or a little cloudy, the skin covering the bag being intire and perfectly free from inflammation.

In the second, the tumor is somewhat larger, the skin which covers it is in an inflamed state, but intire, and the discharge made thro' the puncta lachrymalia, is of a pale yellow, or purulent colour.

In the third, the skin covering the sacculus is become sloughy and burst, by which means the swelling is in some measure lessened; but the mucus, which while the skin was entire, used to be pressed out thro' the puncta lachrymalia, now discharges itself thro' the new aperture; the ductus ad nares, both in this and the preceding state, are not otherwise diseased, than by the thickening of its lining.

In the fourth, the passage from the sacculus lachrymalis into the nose is totally obliterated, the inside of the former being either ulcerated or filled up with a fungus, and attended

tended sometimes with a caries of the bone underneath.

These will, I think, comprehend every state and circumstance of the disease, and if attended to, will in general point out the proper method of treating it.

The ancients, who supposed this disorder in its first state to be an inflammatory defluxion from the brain on the caruncle tending to suppurate, directed their first attention to prevent such consequence, for which purpose they employed phlebotomy, cathartics, issues, setons, collyria, and refrigerant applications of all sorts *; and these not succeeding, they had recourse to such as they thought would hasten the suppuration of the supposed abscess †.

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* The old writers have many forms of collyria, epithems, &c. which they used upon this occasion, but issues and setons they lay great stress on, which practice may immediately satisfy us what was their opinion of the nature of the disease.

“ *Omnium vero præstantissimum est setaceum, materiam enim ad oculos fluentem potenter ad se trahit et evacuat, caput ad omnibus excrementitiis humoribus expurgat, et egregie corroborat, quid plura, tanti est momenti ut inveteratam fistulam lachrymalis sine hoc præsidio vix curari posse.*”

† Mr. Serjeant Wiseman most certainly did not understand this disease, and mistook it either for a tumor of the encysted kind, or for an inflammatory defluxion, and treated it as such, his words are,

“ *Egylops*

By the improper use of medicines of the latter kind, it frequently happened that the skin became inflamed and burst, the discharge which necessarily followed this accident, together with the heated appearance of the parts about, confirmed their opinion of a collection of matter within, and according to such supposition, they attempted to obtain a cure by dilating the orifice, and endeavouring to make an incarnation from the

“Ægylops is a tumor of the inner canthus of the
 “eye, either scrophulous, ætheromatous, or of the
 “nature of a meliceris, or sometimes with inflamma-
 “tion; the causes of Ægylops are the same that pro-
 “duce the like tumor in other places, but sometimes
 “it is made by fluxion, and appeareth first as a phleg-
 “mon: if it be struma or atheroma it is made by con-
 “gestion.”

“The indications of cure are taken from the Ægy-
 “lops, whether it be in its beginning with inflam-
 “mation, or by congestion, passing its matter forth
 “under the cilium into the eye, in which case it is
 “fistulated. Anchyclops has also its peculiar way of
 “treating as other tumors of the glands.”

Without any design to criticise on the strange unintelligibility of the Serjeant's language, I believe, I may venture to say, that no man who is not previously acquainted with the nature of the disease, will learn from hence that its seat is in the lachrymal sac, and that an obstruction in the nasal duct is the first cause of it.

To come still nearer, or even into, our own time, Dr. Daniel Turner compiled a treatise of surgery, which was universally dispersed, and read all over the kingdom, and was at that time generally looked upon as a true representation of the London practice: the
 Doctor

the bottom of the hollow ; not being acquainted with the situation, or use of the nasal duct, they took no care to free it from the obstruction under which it laboured, but dressing the sore like a common impostumation, permitted it either to be filled up with a loose fungus, or to contract itself to a narrow fistulous orifice, which daily discharging a discoloured kind of fluid, and not healing by such means as they made use of, they concluded the bone underneath was carious, and

Doctor says, “ Anchylops or Ægylops, are diseases of
 “ the internal canthus of the eye, in which the lachry-
 “ mal gland is concerned, and from whence the fistula
 “ of the same part is denominated ; the prognostic may
 “ be gathered from the method of cure, in which, univer-
 “ sals premised, such as bleedings, purgings, &c. you may
 “ attempt to dissolve the humour by some gentle ano-
 “ dyne, or discutient cataplasm, but if it inflame and
 “ suppurate, you must hasten maturation, as well as
 “ the discharge, by reason of the part it lies upon ; but
 “ when notwithstanding all your endeavours to incarn
 “ and agglutinate, the matter continues to discharge
 “ itself, not only by the outward orifice, but also un-
 “ der the cilium into the eye, you must try some more
 “ powerful desiccative.”

I believe no one will venture to say, that the nature and seat of the disease is more or better explained by what the Doctor has said, than by the Serjeant ; and I think it is perfectly clear, that neither of them had any true idea of it at all, they both mistook the caruncle for the lachrymal gland, and the disease for an encysted, or a scrophulous tumor, which ought to be brought to suppuration ; the lachrymal sac, the ductus ad nares, their use, and the disorder of them creating the complaint in question, they were totally unacquainted with.

and made way down to it, either by removing the parts with a cutting instrument, or by destroying them with caustic, and cautery, intending to procure an exfoliation, and thereby a firmer basis to heal on *.

But since the use of the ductus nasalis has been known, since it has been discovered that an obstruction in this is the primary and principal cause of the disorder, and that what passed for the cavity of an abscess is really the sacculus lachrymalis, both the intention of cure, and the means, have been considerably altered.

In the first and most simple state of the disease, viz. that of mere obstruction, without inflammation, much pains have been taken to restore the parts to their natural state, and use, without making any wound or division at all; the introduction of a probe, the injection of a fluid, and a constant

* Humulo summum ejus foraminis excipiendum, et totum id cavum sicut in fistulis dixi, usque ad os excidendum. CELSUS.

Corpus id quod inter angulum usque ad abscessum est excoluimus et carnes e profundo educimus; quod si igitur per summa ruptus fuerit abscessus, totum id quod eminet usque ad os excidendum. PAULUS.

Si vero per hæc medicamenta non curetur, aut recediret postea, signum est quod os est corruptum de subtus quare, tunc oportet locum detegi et os corruptum removeri. LANFRANC.

stant compression made on the outside of the sacculus in the corner of the eye, are the principal means by which this has been attempted.

Some few years ago M. Anel made a probe of so small a size as to be capable of passing from the eye-lid into the nose, being introduced at one of the puncta lachrymalia, and passing thro' the sacculus and duct; with which probe he proposed to break thro' any small obstruction, which might be found in its passage.

He also invented a syringe whose pipe is small enough to enter one of the puncta, and by that means to furnish an opportunity of injecting a liquor into the sacculus, and duct; and with these two instruments he pretended to be able to cure the disease whenever it consisted in obstruction merely, and the discharge was not much discoloured. The first of these, viz. the passage of a small probe thro' the puncta, has a plausible appearance, but will, upon trial, be found very unequal to the task assigned; the very small size of it, its necessary flexibility, and the very little resistance it is capable of making, are manifest deficiencies in the instrument; the quick sensation in the lining of
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the sac, and duct, and its diseased state, are great objections on the side of the parts, supposing that it was capable of answering any valuable end, which it most certainly is not.

That the passing a fine probe from one of the puncta lachrymalia into the nose is very practicable, I know from experience, but I also know from the same experience, that the pain it gives, and the inflammation it often excites, are much greater than any benefit which does or can arise from it.

It is said that the principal use of this probe is to clear the little ducts leading from the puncta into the sacculus, and the obstruction of those ducts is often mentioned as a part of this disease; by which one would be led to suppose that it was a circumstance which frequently occurred, whereas it is seldom if ever met with, and when it does happen, can never produce the disease in question, the principal characteristic of which, is a discharge into the inner corner of the eye upon pressure made in the angle; this discharge is made from the sacculus, thro' the puncta, and proves that the latter are open; the passing a probe therefore thro' these seems to be perfectly unnecessary, since a stoppage of them would
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never give rise to that disease, which consists in an obstruction to the passage of any thing from the sac into the nose, and not from the eye into the sac.

The syringe, if used judiciously while the disease is recent, the sac very little dilated, and the mucus perfectly clear, will sometimes be found serviceable; I have used it where, I think, it has been much so; I have by means of it injected a fluid thro' the sacculus into the nose, and in two or three instances have effected cures by it, but I have also often used it ineffectually; it gives no pain, and a few trials render the use of it very little troublesome.

Fabricius ab Aquapendente invented an instrument, which was so contrived, as by means of a screw to make a pressure externally on the lachrymal bag, from the use of which, he says his patients received much benefit; this instrument has been considerably improved by late practitioners, and is still recommended as very useful.

All the good that can be obtained by compress and bandage, this screw is capable of procuring; but it is also subject to all the same inconveniencies, arising from the impossibility of determining exactly the due degree

degree of pressure, for if it be so great as to bring the sides of the upper part of the sac into contact, all communication between it and the puncta will be thereby stopt ; if it be but slight, the accumulation will not be prevented, nor does it in either case contribute to the removal of the obstruction in the nasal duct, the primary and original cause of the disease.

If the curative intention was to procure an union of the sides of the sacculus, as in the case of parts separated from each other by the formation of matter or sloughs, and the pressure could be made uniformly and constantly, possibly it might be so managed as to answer a valuable purpose ; but as that is not the intention, the pressure, whether made by an instrument, or by a common roller, and compress, contributes little or nothing toward a cure, nor did I ever see one effected by it, altho' I have several times tried both.

That some slight obstructions of the nasal duct have gone off while the compression has been used, I do not deny, but am in great doubt concerning the share which it had in removing them, having seen more than one instance of a cure being obtained
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by the use of a proper regimen and medicines, in slight and recent cases, where nothing was used externally but a vitriolic collyrium ; and having been always disappointed in my attempts by mere bandage of any kind.

Besides these means of attempting a cure without incision, the gentlemen of the French Academy have favoured us with some others, such as, the introduction of a probe into the lower part of the nasal duct within the nose, the injection of a fluid by the same orifice, the passing a seton from the punctum lachrymale superius thro' the sacculus and duct and out at the nostril, there to remain 'till the cure is compleated ; and for those purposes they have invented and given figures of a number of probes, syringes, and many other instruments which, they say, have been very successfully used ; far be it from me to say that they have not, or to prevent any body from trying those, or any other means by which mankind may be cured of diseases with the least possible fatigue and pain ; but from the experiments which I have made of most of these processes, I must beg leave to suspend my assent to their general utility, or even to their frequent practicability.

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Repeated

Repeated trials upon dead subjects will undoubtedly enable a man to pass the probe, or perhaps now and then the seton, but he will also find it often absolutely impracticable; and in the few instances in which he may chance to succeed as to this attempt, what will in general be the consequence? not what the writers on these subjects have taught him to believe, a cure, but a sense of pain, and degree of inflammation, which the patient, before such attempts were made, was free from, an exasperation of the disease, and a loss of much time, as I have more than once experienced. To which consideration may be added, that infants and young children are very often afflicted with this disorder, and that such processes as these, are absolutely impracticable upon them.

I should be very sorry to be misunderstood in what I now say, to have it suspected, that I mean to derogate from the character of those gentlemen who have been the inventors of these operations, or that I speak slightly of them, either because they are not my own, or because I have not been able to succeed in the use of them: it would give me great concern if I thought it would be believed that I acted upon so mean, so

narrow a principle ; no man is or would be more pleased with any real improvement in our art than myself, but having taken all the pains in my power to apply the discoveries of which I am now speaking to practice (the only test of good surgery) and having found them most frequently impracticable, always ineffectual, I think myself obliged to say so.

Anel's syringe I have used successfully, and think it may now and then be very well worth trying, in recent cases more especially, as it may always be used without giving any pain, or running the risque of raising an inflammation ; but I must also beg leave to observe, that if the bag is not much dilated, the mucus clear, the skin and cellular membrane uninflamed, and the parts about soft and easy, if the patient will take care not to suffer too great an accumulation, will, by the frequent use of a vitriolic collyrium, keep the eye-lids clean and cool, and carefully avoid such things as irritate the membrana narium, or occasion a sudden flux of lymph from the lachrymal gland, the disease may for many years, nay often for life, be kept from being very troublesome, or inconvenient, without any surgery at all.---

S E C T. V.

WHEN the disease is got beyond the simple state just described, that is, when the parts round about are much, or constantly inflamed, or the skin covering the tumor is burst, there is something more to be done, if a cure is intended.

In this state an opening in the upper part of the sacculus lachrymalis becomes in general absolutely necessary; and as a wound made by a knife leaves a much less disagreeable scar than that which necessarily follows the bursting of the skin, one being a mere simple division, the other a loss of substance; it will always be found best to anticipate the accident of bursting, by making the opening, as soon as the integuments are in such a state as to threaten to it.

For the making this incision authors have been very particular in their direction with regard to its place, manner, and form; they have ordered it to be semilunar, having its concave part toward the eye, and that the point of union of the lids should be exactly opposite to the center of the incision; this lunated figure was calculated to correspond with the course of the fibres of the orbicular

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lar muscle, upon a supposition that a transverse section of them would produce an inversion of the lower lid, an effect which never follows: all that the surgeon need observe, is to take care to keep the knife at a proper distance from the juncture of the palpebræ, to begin the incision a very little above a line drawn from that juncture toward the nose, and to continue it downward; its form may full as well be straight as any other, and the best instrument to make it with is a small crooked bistory.

If the sacculus is already burst, the place of opening is determined, and the orifice may be enlarged with a knife, or dilated.

The incision made, the sacculus should be moderately distended, either with dry lint, or a bit of prepared sponge; by which means, an opportunity will be gained in two or three days of knowing the state of the inside of the sac, and of the ductus nasalis; if the former is neither sloughy nor otherwise diseased, and the obstruction in the latter but slight, it sometimes happens that after a free discharge has been made for some days, and the inflammation occasioned by the first operation is gone off, the sac contracts itself, a superficial dressing, with moderate

pressure, heals the sore, the lachrymal fluid resumes its wonted course, and the disease disappears.

Of this I have seen more than one instance, and perhaps it would happen oftener, if the very absurd manner in which this disorder is generally treated after opening the bag, did not prevent it: in this state success is to be expected from the most gentle treatment only; whatever irritates, inflames, or destroys, will infallibly prevent it.

If this simple method does not succeed, or from the state of the parts seems unlikely to do so, another must be tried, which the opening already made will enable us to put in practice: the point to be aimed at is, if possible, to render the nasal duct pervious to the lachrymal fluid; and we must endeavour to obtain this end by such means as give the least pain, excite the least inflammation, and leave the parts as near as possible in their natural state, that is, we are to endeavour to dilate the passage from the sac to the nose, by some means which will gradually distend it without destroying its texture, in the same manner as the dilatation of the urethra ought to be effected in the case of strictures, by passing
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either a probe, or a piece of cat-gut, or a bougie, gently into it, as far as it will easily go, and repeating it occasionally, until it is got quite through, and the passage is free *.

Every man will determine for himself, by what means he will endeavour to accomplish this end, nor is it of very material consequence which he prefers, provided it be done gradually, and without giving pain; a proper dilatation of the upper part of the sacculus by dry lint, or a bit of prepared sponge, will be found useful previous to the attempt toward passing any thing into, or thro' the duct; and it will also be necessary that the surgeon be possessed of a just idea of the size and direction of it, both in a natural, and a diseased state; for whoever has formed one only from viewing its bony channel in a dry skull, will upon experiment find himself much deceived with regard to its diameter in a living subject; the

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* This caution is very necessary to be observed in the cure of strictures of the urethra, in which case the proper intention is gradually to dilate the passage, and to procure an increased discharge of mucus from the lacunæ; this should always be done gently, and by means which give as little pain as possible; whatever irritates or gives pain will certainly do mischief, will add to the obstruction, and increase the dysury.

membrane which lines it is not extremely thin, in a healthy state, and when it is inflamed or thickened by obstruction, the passage thro' the duct is thereby rendered very small, if it is not quite shut up.

They of our ancestors who mistook this disease for an abscess, and found (as indeed they always must) extreme difficulty in filling it up with sound flesh, generally had recourse to escharotic medicines for the destruction of that fungus which seemed to hinder them from accomplishing their end ; by which conduct they irritated all the neighbouring parts, increased the inflammation, and were most frequently frustrated in their expectation of a cure at last. The same kind of medicines were also used by those who supposed the disorder to be an encysted tumor, with intention to eradicate the cyst, which, they thought, prevented a cure by remaining behind ; and both these methods of practice were vindicable, supposing their idea of the disease had been a true one, which it most undoubtedly was not ; their reasoning was right, but their principles were wrong ; they were in general very little acquainted with the structure and use of the parts, and totally mistook the nature of the disease.

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But now, that we are thoroughly acquainted with both, this kind of practice ought surely to cease, as the preservation of the sacculus and duct, and not their destruction, are, or ought to be, intended: all cathæretic medicines must be wrong and prejudicial, at least while the intention is such; an intention at all times rational, and sometimes capable of being fulfilled.

Notwithstanding the destruction of the bag is allowed to be wrong by most surgeons of the present time, yet there are many, who, by their manner of dressing it, after they have opened it, do really, tho' not intentionally, produce the same effect as our forefathers aimed at: it is still a custom with many, as soon as it is opened, to distend the cavity of it with a hard tent, or with dossils of lint charged with escharotic medicines, such as *mercurius precipitatus ruber*, &c. by which means the inflammation is increased, the skin and edges of the incision hardened, and the inside of the sacculus put under the necessity of casting off a slough. This is one of several instances still remaining of our adhering to old methods of practice, after the principles on which such methods were originally formed have been allowed
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even by ourselves to be erroneous ; for this manner of dressing the sore is effectively the same as the antients made use of, while they supposed the disease to be an abscess of the caruncule, and encysted tumor, or a callous ulcer with carious bone ; and was by them intended very properly for the destruction of such callosity, to assist the exfoliation of the supposed caries, and to procure a firm basis to incarn upon.

On the contrary, the point which ought first to be aimed at, immediately after having made an opening into the sac, is to endeavour to remove the obstruction of the natural passage from thence into the nose, by the means already mentioned, which design this method of cramming in escharotic dressings must necessarily frustrate, must frequently render a simple case complex, and at least retard that cure it is designed to expedite.

The only excuse that can be now made for such method of dressing, is that the surgeon is satisfied that the ductus ad nares cannot be restored to its use, and therefore by destroying part of the sacculus, intends to procure such a generation of new flesh, as
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may fill up its cavity, and hinder the accumulation, or lodgment there in future.

If this was feasible, perhaps it might be a vindication of such treatment, but unfortunately it neither is, nor can be so in general; and whoever will attentively examine the natural situation and structure of the parts concerned, will immediately see why it cannot. All, or the greatest part, of the diseased and obstructed duct, lying in its bony channel out of the reach of what is applied to the inside of the sacculus, must prevent the generation of a firm basis at its bottom, and produce a fresh collection of mucus, which in a short space of time lifts up the cicatrix, into a new tumor, and requires the same treatment as if nothing at all had been done.

On the other hand, it must not be denied, that now and then a cure has by this means been effected; but it has been so rarely, that it can hardly be admitted as an authority or vindication of so irrational an attempt.

The parts about the eye are most of them of very quick sensation, and easily irritated; all dressings are in fact extraneous bodies, and therefore when applied to such parts cannot be too soft and light: suppuration is
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an act of nature, not of art ; and is always best executed, when she is least disturbed : this is a general truth, and will hold good in all parts of the body, even where suppuration may be most wanted ; but in the present case, in which the lower part of the sac, and all the duct, are often in such state as not to require any suppuration at all, escharotic dressings of any kind, by producing inflammation both of the eye and caruncle, by rendering the edges of the fore hard, or sloughy, and by destroying the communication between the puncta lachrymalia and sacculus, must necessarily counteract the only proper intention of cure.

I would not in this place be thought to mean that a mere superficial pledgit is all the dressing that is required ; no ; a moderate dilatation of the upper part of the sacculus is at first absolutely necessary, in order to get easily at the duct below ; but this should be effected without the use of corrosive applications of any kind, and is best accomplished by prepared sponge, which will distend to almost any degree, without destroying.

When a passage has been once obtained, it should be carefully kept open, either by
a piece

a piece of cat-gut, a small bougie, a leaden probe, or something of that sort; and when it is thoroughly established, the fore may be permitted to contract, until it becomes no more than what serves for the introduction of the bougie into the duct; in this state I would advise, that it be kept open for some time, injecting now and then a little aqua calcis, softened with mell. roſſar. thro' from above into the noſe; and when it appears, that the paſſage is ſo free, and ſo well eſta- bliſhed, that there is good probability of its preſerving itſelf, the orifice in the angle of the eye, by being covered only by a ſuper- ficial bit of plaſter, or pledgit, will contract and cloſe; and if during its cloſing, mode- rate preſſure be uſed on the ſacculus, to pre- vent a freſh accumulation of mucus, it will aſſiſt the cure.

Whether the ſacculus in a healthy and undilated ſtate, is endued with any degree of contractile power, which it loſes by be- ing diſtended, or to what other cauſe it may be owing, I know not; but have more than once been foiled in my attempts towards this method of curing the diſeaſe, by a freſh col- lection of mucus, notwithstanding the naſal duct has remained open, as appeared by the
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discharge made into the nose, upon pressure on the tumor, the immediate substance of the said tumor, and the passage of an injection, or small probe, after having again opened the sac. Some of these have, upon being again healed, remained good cures, and others not; the uncertainty which attends these cases is great, and the event never to be known but by experiment. Whoever says, that none of them are to be cured by the foregoing method, errs as much as he would, who should expect it to succeed in all; where the disease is in such state, as to admit its being tried, it is very well worth while, as it is not painful, nor tedious; and where it does not answer our expectations, it is no hindrance to any other more efficacious one being made use of afterward; in all these cases, different circumstances in the patient, or in the state of the diseased parts, must produce a variation in the necessary treatment, both in general, and particular; a bad habit will require the use of internal remedies; the combination of other diseases of the neighbouring parts will add to the difficulty and trouble; and even the fairest, and such as seem most likely to succeed, do sometimes resist this, and indeed every other attempt.

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From the necessity of keeping the eye bound while dressings are applied for the dilatation of the sacculus, an inflammation is frequently raised; this added to the necessary discharge of serum, mucus, &c. is apt to heat and excoriate the parts about; therefore, warm fomentations, cooling collyria, epulotic cerates, and renewing the dressings as often as shall be necessary, with whatever else can contribute towards keeping the skin clean and cool, must be found serviceable, as well as pleasant, and should never be neglected.

S E C T. VI.

THE last state which I mentioned of this disorder, is that in which the natural passage from the sacculus to the nose is so diseased as to be quite obliterated, or in which the bones are sometimes found to be carious.

The methods hitherto described have all been calculated to preserve the natural passage, and to derive the lachrymal fluid again thro' it; in this attempt they are sometimes successful, but when they are not, there is no surgical means left, but to attempt the formation of an artificial one in its stead.

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The upper and hinder part of the sacculus lachrymalis is firmly attached to the os unguis, a small and very thin bone just within the orbit of the eye; which bone is so situated, that if it be by any means broke thro', or removed, the two cavities of the nose, and of the orbit, communicate with each other, consequently the os unguis forms the partition between the hinder part of the lachrymal bag, and the upper part of the cavity of the nose; and it is by making a breach in this partition that we attempt the formation of an artificial passage for the lachrymal fluid.

This operation, if considered merely as a perforation, is no invention of the moderns, the ancients undoubtedly performed it; but tho' it was executed much in the same manner as it is now, yet it was not done with the same intention.

From the accounts which our ancestors have left us of the disease in question, it is plain, that they supposed it to be always attended with a degree of callosity, and often with caries, and that the surest way to obtain a cure was to lay the bone bare: this they effected either by caustic or cautery, according to the humour of the surgeon,

geon, or the fears of the patient ; if caustic applications were used, they waited the separation of the eschar ; and if they found, or believed the bone to be altered, they applied an actual cautery to it ; if the bone to which the iron was applied was the os unguis, it was too thin to bear much heat, or much pressure, consequently was easily burnt, or broke thro', and by that means an opening was made into the nose ; a terebra was also sometimes made use of instead of cautery, and the same effect produced thereby *.

By

* Oculo et cæteris junctis partibus bene obtectis os ferramento adurendum est vehementius, quod si jam carie vexatum est, quo crassior huic squama abscedat quidam adurentia imponunt. CELSUS.

Cum isto pulvere in veritate fere mortificabam omnes fistulas curabiles, et cum cauterio ferreo, aut æneo—factâ mortificatione tali totius carnis usque ad os, cum pulvere aut unguento superdictis superpone mortificato butyrum et escharâ aspice, et si fuerit os corruptum cauteriza ipsum usque ad ejus profundum.

GUL. DE SALICETO.

Postea si homo fuerit delicatus, per istud foramen mittatur Canellus ferreus vel æneus subtilis usque ad profundum si poteris, et per ipsum canellum ferrum candens immitte et fistulæ radices decoque : at si timuerit ignem immittatur pillula de unguento ruptorio.

ROLANDUS.

Osse detecto ferrum imprime calidum supra ipsum et ipsum cauterium mediocriter comprimendo postea imple totum vulnus cum oleo rosarum misto cum vitello ovi.

E

LANFRANC.

By each of these methods, a passage being made from the *sacculus lachrymalis* into the nose, a cure was sometimes accidentally obtained; but the cautery was applied, either to destroy the supposed callosity, or to desquamate a caries; and the *terebra*, either for the same reason, or to make a passage for the discharge of matter, which lodged, and as they thought, hindered the healing of the sore; for as they were not acquainted with the natural passage of the lachrymal fluid, it would be absurd to suppose, that by means of this perforation they intended the formation of an artificial one. Callosity and caries were their two characteristics of the disease; the dissolution of one, and the exfoliation of the other, were all they had in view from the use of either caustic or cautery, and the perforation of the *os unguis* was either accidental, or made merely for the discharge of matter*.

Indeed,

* *Fabricius ab Aquapendente*, who in general copies *Paulus*, speaks of the perforation as meant only to make a depending orifice for matter, “*post carunculæ et loci excisionem, terebra humorem aut pus in nares derivant.*”

FAB. AB AQUAPENDENTE.

Gul. de Saliceto, and indeed many other of the ancient writers, speak of using both cautery and *terebra* to the purpose of deriving the matter and sanies which lodge in the sac, into the nose; and, by making a depending

Indeed, if we attentively consider what the old writers have left us on this subject, it will appear, that tho' they knew that a passage into the nose was sometimes a consequence of their use of the terebra and cautery, yet the operators had no very accurate knowledge of the parts they made so free with; no precise idea of the bone on which their instruments were applied, or thro' which they passed; nor of the place most immediately proper for such application of them; sometimes they perforated

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the

pending orifice, to procure a firm basis to heal on.

“ Aspice os, et si fuerit corruptum cauteriza ipsum usque ad ejus profundum, et concavitatem cum cauterio punctuali, et perfora ipsum ad aliam partem, ejus ut sanies per nasum fluat, deinde incarnetur et consolidetur.”

GUL. DE SALICETO.

Indeed the formation of an artificial passage for the lachrymal fluid could make no part of the intention of those, who were not rightly acquainted with the natural one.

Paulus mentions perforation with the terebra as the practice of some in his time, but from what he says, it is plain he did not practice it himself, or think it necessary, and that he regarded it only as a method of making a depending orifice; his words are, “ Quod si jam carie vexatum est ferro candenti, acuto, ac in cuspidem abeunte adurimus spongiâ frigidâ madente oculo imposita.”

“ Sunt qui post carunculæ excisionem terebra usi humorem aut pus in nares derivarint; nos autem satis habuimus eousque solum ferramentis ad Ægylopem accommodatis adurere ut squama abscederet.”

PAULUS AEGINETA.

See also FAB. AB AQUAPENDENTE.

the os unguis very properly, sometimes the cautery or terebra was thrust into the bony channel of the natural nasal duct, and sometimes they were applied to the nasal process of the maxilla superior: the direction given by most of them to rasp the bone (*scalpris abradere*) and to impress the cautery with some force, that the bone may be sooner exfoliated, (*ut citius squama abscedat*) plainly prove, that either they were not aware of the tender structure of the os unguis, or that they did not intend to apply their instruments to it; if the former was the case, the perforation was accidental; if the latter, they must have often done much more harm than good; that is, they must have burned and destroyed unnecessarily parts which have little or nothing to do with the disease; and by such treatment of them must have much oftener prevented, than accomplished a cure*.

The

* Petrus de Marchetti, tho' perfectly sensible that the os unguis was often broke thro' by the cautery, yet insists upon it, that it served no other purpose than to hasten exfoliation. "*Præterquam quod hujus perforationis non alius sit usus quam ut os perforatum aut inustum citius abscedat. Observandum tamen non esse perforandum os nisi præsentē maxima ipsius corruptione, sola siquidem ejus superficie corrupta aut alterata sit fuerit partem læsam abradere.*"

PETR. DE MARCHETTI.

And

The intention of the present practitioners in making this perforation is different from that of our ancestors ; but it is more rational, and founded upon the nature and use of the parts concerned in the disease ; it is to form and maintain a new artificial passage from the lachrymal bag into the nose, when the natural one can no more be rendered useful, and without any view to any thing else : this, I say, is the aim of them all ; but tho' they are perfectly agreed in their intention, yet they are not so with regard to the instrument which they use, some still continuing the actual cautery, others using other different instruments.

The ancients preferred the cautery, for reasons which have already been assigned ; but since the symptoms of callosity and caries have been found to be very infrequent, and the os unguis has been perforated solely with a view to make an artificial passage into the nose, the cautery has with many lost much of its ancient credit, and other instruments have been substituted in its place,

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which

And Mr. Verdue, a very modern writer, is also of the same opinion, “ Le meilleur remede pour amorter
 “ l'acide qui cause la carie, c'est de passer legerement
 “ un caustere actuel sur l'os sans le percer.”

which give less pain at the time of using, and leave less deformity afterward.

But tho' many have laid aside the hot iron, yet it still has its advocates, who prefer it to every other instrument, and who have therefore endeavoured to obviate its inconveniencies: they have directed that the cannula thro' which it passes, be made of a conical form, and so large at its lower end, as that they shall not touch each other; they have ordered this cannula to be wrapped round with wet rag, at the time of using it; they have placed a check upon the top of the iron to prevent its point from going too far, and have been particular in directing us to withdraw it as soon as it is got thro'.

But notwithstanding these and every other caution, the cautery gives great pain at the time of using, lengthens the attendance, and most commonly produces unnecessary deformity, even in the hands of the most dextrous, not to mention the horror occasioned by thrusting a hot iron into the corner of the eye.

When the inconveniencies arising from the use of this instrument, even in the best hands, are important, it may be easily guessed

fed what they must be in those of the clumsy and ignorant ; and therefore, unless some real advantage attends it, it ought certainly to be so discouraged, that no one may attempt to revive it ; let us then see with what intent it has been used by those who have appeared most fond of it, and who may fairly be supposed to have best known how to manage it.

The defence made by the wet rag against the heat of the iron, the disproportioned size, and the figure of the cannula, very plainly shew, that its effect is designed to be executed by the point only ; and the check at the upper end as clearly shews, that that point is designed to pass no farther than just thro' the bone, while all the ill effects are occasioned by the upper part of the cautery on the eye-lids and angle of the eye : now, if it is not designed to produce any effect on any of the parts thro' which it passes down to the bone, but merely to burn thro' that and the membrana narium, and thereby make an opening into the nose, I do not see how it differs from any other perforator of equal size, except in the mischief it does to the parts above, to which it should do nothing.

It does indeed burn the bone and membrane, thro' which it pierces, and thereby prevents the orifice from closing again immediately, and this is certainly the principal end of perforation, by whatever instrument it is performed; but it is also as certain, that the same end is obtainable by means less mischievous and less horrible.

Our ancestors had a very plausible reason for using it, their ideas of callosity and caries always accompanied this disease, and authorised them to make use of such applications as they thought most proper in such cases; but now, when we know that these are symptoms which very rarely occur, or even if they do, that they are removable in a much easier manner, we are no longer vindicated in continuing an alarming and a painful process, when we can obtain the same end by much gentler means; for whether the membrana narium be burnt thro', or divided in any other manner, it is the future method of dressing that opening that must maintain it, let it be made by whatever instrument, or in whatever manner it may.

The late Mr. Cheselden was a warm patron of the cautery, took a great deal of
pains

pains to prevent it from doing mischief, and has said in its defence, that---“ other methods of curing this disease have been much recommended, though often unsuccessful, but this, well performed, is infallible.” After so positive an assertion, I am sorry to be obliged to say, that it is contradicted by manifold experience; that there have been many instances of perfect cures performed without the use of a cautery; and that some of those who have been cauterised by Mr. Cheselden himself have been disappointed in the expectation of one; nor could he, with all the pains he took, prevent the effect of the heat of the iron, or leave his patient without a weeping eye.

The intention is merely to make an opening thro’ the os unguis and membrana narium into the cavity of the nose, and to treat that perforation in such a manner as that it shall most probably remain open, and give passage to the lachrymal fluid from the puncta, after the external sore is healed.

The extreme thinness of the bone renders the passage of the instrument very easy, and if the breach which is made be of any tolerable size, I am inclined to think
that

that it never is filled up again by bone, but that when it is closed, it is by the membrane; and therefore it is the surgeon's business to make a pretty large opening in the bone, and to prevent its being closed again, by rendering the edges of the membrane on each side of it callous.

To make this opening, many different instruments have been devised, and used, a large strong probe, an instrument like a common gimblet, a curved trocar, &c. &c. each of which, if dextrously and properly applied, will do the business very well; the one necessary caution is, so to apply whatever instrument is used, that it may pierce thro' that part of the bone which lies immediately behind the sacculus lachrymalis, and not to push up too far into the nose for fear of injuring the os spongiosum behind, while it breaks its way.

For my own part I have always used the curved trocar, which has served my purpose well, and from which I have never experienced any inconvenience; in using it the point should be turned obliquely downward, from the angle of the eye toward the inside of the nose; the accomplishment of the breach will be known by the discharge

charge of blood from the nostril, and of air from the wound upon blowing the nose. The most precise direction in this part of the operation will be of but little use to him who has no idea of the natural structure and disposition of the parts concerned, and who ought therefore to get such information as soon as he can: but whoever is at all acquainted with this matter, or will attend to the situation and connection of the os unguis, knows that this bone is divided into two parts by a perpendicular ridge; that the lachrymal sac is connected to all that part which is anterior to this ridge; and that the posterior part of the bone contributes to form the orbit of the eye, and has little or no connection with the lachrymal sac: the trocar must be applied therefore to that part of the bone which is anterior to the ridge, and consequently behind the lachrymal bag; by the passage of the instrument, all this part of the bone will in all probability be broken, but from which no mischief will ensue.

An attention to the natural situation of these parts will also show the practitioner, that if the point of his instrument be passed in a transverse direction with regard to the
nose,

nose, the os spongiosum superius will be unnecessarily wounded or broken ; and if it goes in too perpendicular a direction, it may get into the channel of the natural duct, and its point will be stopped by bearing against that part of the maxilla superior which contributes to the formation of that channel.

It has been objected to the trocar, that it may break the os unguis to some distance from the place where its immediate point is fixed ; to which I can only answer, that I have performed the operation a great number of times, and never yet have seen any inconvenience to arise from it : indeed a total removal of a small piece of the bone would be a thing rather to be wished for than avoided ; if we may reason by analogy, it seems to be a necessary requisite toward preserving a future passage ; for we very well know in a caries of the bones forming the roof of the mouth, that they are sometimes bare for a large compass, and by casting off leave a considerable aperture into the nose ; yet in many cases, when the virus is removed, and the habit recruited, that opening will so contract as not to suffer a small quill to pass where you might have

have introduced your finger, nay often will quite close ; and therefore tho' the opening made in the os unguis may possibly in spite of all endeavours be again closed up, yet a free breach in it seems to be the most likely means to prevent it ; and upon this principle I have always turned the perforator round very freely whenever I have used it, have never seen any mischief from it, and do attribute the success I have had with it, in some measure to this method of using it.

As soon as the perforation is made, a tent of lint should be introduced, of such size as to fill the aperture, and so long as to pass thro' it into the cavity of the nose ; this should be permitted to remain in two, three, or four days, till the suppuration of the parts renders its extraction easy, and after that a fresh one should be passed every day, until the clean granulating appearance of the sore makes it probable that the edges of the divided membrane are in the same state : the business now is to prevent the incarnation from closing the orifice, for which purpose the end of the tent may be moistened with spir. vitriol. ten. or a piece of lunar caustic so included in a quill, as to leave little more

more than the extremity naked, may at each dressing, or every other, or every third day be introduced, by which the granulation will be repressed, and the opening maintained; and when this has been done for some little time, a piece of bougie of proper size, or a leaden cannula may be introduced instead of the tent, and leaving off all other dressing, the fore may be suffered to contract as much as the bougie will permit, which should be of such length, that one extremity of it may lie level with the skin in the corner of the eye, and the other be within the nose.

The longer time the patient can be prevailed upon to wear the bougie, the more likely will be the continuance of the opening; and when it is withdrawn, the external orifice should be covered only by a superficial pledget, or plaster, and suffered to heal under moderate pressure.

There is another method which has been much recommended by some French writers to prevent the closing of the opening in the os unguis, which is, to introduce a cannula either of gold, or silver, or lead into the aperture; and to permit the fore to heal over it, suffering the cannula to remain, or to come away by the nose. For

For my own part I cannot say any thing to it, having never had occasion to try it; the cases of this kind which I have had under my direction, having generally succeeded under some of the methods already mentioned; which methods will frequently prove successful, if the surgeon is clear in his intention, pursues it steadily, and properly, and refrains from doing too much: tho' I must again repeat what I have said before, viz. that there is no method of treating this disorder which is infallible, none that will absolutely and in all cases prevent a return, especially in scrophulous habits; yet when a just distinction is made between those cases which are in their own nature incapable of cure, and those which by being improperly treated are not cured, I am inclined to believe, that the number of the former will be found much smaller, than it is generally imagined to be.

F I N I S.

R E M A R K S

O N T H E

D I S E A S E,

C O M M O N L Y C A L L E D

A F I S T U L A i n A N O.

By PERCIVALL POTT, F.R.S.

S E N I O R S U R G E O N

t o S T . B A R T H O L O M E W ' s - H O S P I T A L .

—Dumque nimis jam putrida membra recidit,
Excessit medicina modum; nimiumque secuta est,
Quâ morbi duxere manus. LUCAN.

The T H I R D E D I T I O N .

L O N D O N :

Printed for L. HAWES, W. CLARKE, and R. COLLINS,
in Pater-noster-Row. M. DCC. LXXI.

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T O
Mr. STAFFORD CRANE,
A N D
Mr. ROBERT YOUNG,
P R I N C I P A L S U R G E O N S
to St. BARTHOLOMEW'S-HOSPITAL.

GENTLEMEN,

THE truth of the doctrine,
and the success of the
practice, contained, and recom-
mended in the following sheets,
are perfectly well known to you.

THIS is one reason, why I
have prefixed your names to
them.

BUT I have another, and
that, to me, a more powerful
A 2 one.

one. Educated in the same Hospital, we have passed the greater part of our lives in an uninterrupted course of friendly communication: and I am very glad to embrace this, and every, opportunity of testifying, how pleasing such correspondence has always been, and still is, to,

GENTLEMEN,

Your very sincere Friend,

and most obedient Servant,

Watling-Street,
Oct. 1765.

Percivall Pott.



IT has been said, that when a man thinks that he can, by publishing his opinion, derive any benefit to his fellow-creatures, he has no reason to be anxious about making an apology for such publication.

This, within a certain limitation, is true; but taken in its full extent, may be urged as an excuse for obtruding that on the world, which may not be worth its acceptance.

Possibly the following Sheets may be thought to come within that predicament.

The only defence I have to make for them is, that from the most diligent and most frequent inquiry into the general method of treating the dis-

ease in question, I am convinced, that such method may be considerably improved ; that is, may be rendered less painful, more expeditious, and more successful.

I should be very sorry to have it thought, that I meant, by this, to signify, that my opinion on this subject is different from that of all my brethren : I know, it is not, I know, that there are some gentlemen of the profession, who think of it as I do : but I also know, that a very different doctrine is inculcated, and a very different method followed, by the majority of writers, practitioners, and teachers.

The number of those who have had frequent opportunities of seeing this kind of disease, is not large, compared to that of those, who are daily liable to be called to the care of it : the number of those who reflect on what they

they see, or read, and who take the liberty of thinking for themselves, is still smaller ; so that the precepts delivered by such as have obtained any degree of reputation, do almost necessarily become rules of practice to the multitude.

I have, on this occasion, carefully perused almost every writer of character on the subject ; and think, that I may venture to say, that they are all either defective, or erroneous : they either pass the disease over slightly, and without that regard, which it certainly requires, and deserves ; or subject it to a method of cure, which is operose, painful, tedious, and unnecessarily productive of future evil.

The term Cutting for a Fistula, conveys to a patient a terrible idea ; and this terror is not a little increased by his incapacity of seeing the part diseased. The majority of writers have greatly

increased, rather than lessened, this dread : and, as the operation is (under their directions) sometimes performed, it is, indeed, a very severe one : a great part of this severity appears to me to be unnecessary ; and I cannot help thinking, that a more serious reflexion on the parts concerned in the disease, and on its different nature in different states and circumstances, would lead us to a more rational method of treating it, and to a more easy and expeditious cure.

To point such method out is the intention of the following tract.

In the execution of it, I have sometimes found myself under a necessity of controverting the opinions of some gentlemen of deserved eminence : if I have done this with decency and good manners, no apology is necessary. The
honour

honour of our art, and the moral characters of its professors suffer, whenever we pay so blind deference to any one, as prevents us from using our own judgments, and from declaring freely the result of our inquiries or experiments. Truth, as Lord Bacon has said, is not the child of authority, but of time. And were we to allow ourselves to suppose, (let the subject be what it may, provided it be liable to experiment) that nothing more, or new, could be taught, it is pretty clear, that nothing more, or new, would be learnt.

I therefore hope, that the freedom which I have used, either in relating the opinions, or in objecting to the practice of others, will not be attributed to an invidious disposition to find fault; but merely to a desire of being serviceable to mankind in that way, in which, I flatter myself, that I may be, in some degree capable; and of improving,

improving, as much as in me lies, the
very necessary, and universally useful
Science, of SURGERY.





OF THE
FISTULA IN ANO.

SECT. I.

CLEAR and precise definitions of diseases, and the application of such names to them as are expressive of their true and real nature, are of more consequence than they are generally imagined to be: untrue or imperfect ones occasion false ideas; and false ideas are generally followed by erroneous practice.

It would be no difficult matter to produce instances of disorders, whose treatment has, for a great length of time, been accomodated more to the titles imposed
upon

upon them, than to their true and real character : among these, my present subject is a most glaring proof.

THE custom of giving the appellation of *Fistula* to every impostumation, and to every collection of matter formed near to the *Anus*, has, by conveying a false notion of them, been productive of such methods of treating them, as (though, perhaps, suited to such idea) are diametrically opposite to those which ought to be pursued : such as have often rendered those cases tedious and painful, which might have been cured easily and expeditiously : and consequently such as have brought disgrace on our art, and unnecessary trouble on mankind.

A SMALL orifice or outlet from a large or deep cavity discharging a thin gleet, or sanies, made a considerable part of the idea, which our ancestors had of a fistulous sore, wherever seated. With the term fistulous they always connected a notion of callosity ; and, therefore, whenever they found such a kind of opening yielding such sort of discharge, and attended with any degree of induration, they called the complaint a *Fistula*. Imagining this callosity to be a diseased

diseased alteration made in the very structure of the parts ; they had no conception that it could be cured by any means, but by removal with a cutting instrument, or by destruction with escharotics : and, therefore, they immediately attacked it with knife or caustic, in order to accomplish one of these ends : and very terrible work (by their own accounts) they often made, before they did accomplish it.

SEVERAL of the abovementioned circumstances do frequently attend collections of matter near to the rectum ; and therefore for want of proper attention to the true nature of the case, the custom of calling them all *Fistulæ* has generally prevailed, though without any foundation, in truth, or nature.

THAT abscesses formed near the fundament do sometimes, from bad habits, from extreme neglect, or from gross mistreatment, become fistulous, is certain ; but the majority of them have not at first any one character or mark of a true fistula ; nor can, without the most supine neglect on the side of the patient, or the most ignorant mismanagement

management on the part of the surgeon, degenerate, or be converted into one.

COLLECTIONS of matter from inflammation (wherever formed) if they be not opened in time, and in a proper manner, do often burst: the hole, through which the matter finds vent, is generally small, and not often situated in the most convenient, or most dependant, part of the tumor: it therefore is unfit for the discharge of all the contents of the abscess: and, instead of closing, contracts itself to a smaller size: and, becoming hard at its edges, continues to drain off what is furnished by the undigested sides of the cavity.

THIS is often the case in the most muscular, or fleshy parts of the body, where the cellular and adipose membrane does not abound; but is more particularly so in the neighbourhood of the anus, where that membrane is large in quantity, well stocked with fat, and not compressed by the action of any large or strong muscles.

WHY critical defluxions and abscesses are frequently formed in this part, is so obvious to every one, who considers its natural structure, that it must be quite unnecessary to enter into an explanation of it: I shall therefore only observe, that when it becomes the seat of such kind of defluxion, it can make little or no resistance; but immediately swells, and becomes hard to a considerable extent: and although impostumation is very frequently the consequence, yet the induration extending itself a good way beyond the bounds of the abscess, the first suppuration is by no means equal to the dissolution of such hardness; especially, if instead of being opened properly, the skin has been suffered to burst.

THE finalness of this accidental orifice; the hardness of its edges; its being found to be the outlet from a deep cavity; the daily discharge of a thin, gleety, discoloured kind of matter; and the induration of the parts round about, have all contributed to raise, and confirm the idea of a true fistula.

To

To this idea, the general treatment of these cases has therefore been made to accord : upon this, has been built the prevailing doctrine of free excision, or as free destruction, without any regard to the original production of the complaint, its particular seat, its date, or any other attendant circumstances ; and without examining, whether it would not admit a more easy, and a more expeditious method of cure. In short ; this notion, that all sinuses near the rectum are necessarily fistulous, has occasioned the prescription of such a manner of treating them, from their very first appearance, as they can hardly ever stand in need of at any time ; and a mere ill-founded supposition, that the induration of the parts about, may be owing to a diseased callosity, is urged as a reason for using them with more severity than even such state would require.

S E C T. II.

WH O E V E R would obtain a true notion of the disease in question, must consider it under all the forms in which

which it makes its appearance. These, which are many, and various, (both with regard to aspect, situation, and symptoms) are, what shew the different nature of the complaint in different states; and are the circumstances, which ought to regulate a surgeon's conduct in the care of it.

SOMETIMES the attack is made with symptoms of high inflammation; with pain, fever, rigor, &c. and the abscess proves truly critical; that is, it becomes a solution of the fever.

IN this case a part of the buttock near to the anus is considerably swollen, and has a large, circumscribed hardness. In a short time, the middle of this hardness becomes red, and inflamed; and in the center of it matter is formed.

THIS (in the language of our ancestors) is called in general a Phlegmon; but when it appears in this particular part, a Phyma.

THE pain is sometimes great; the fever high; the tumor large, and exquisitely tender: but however disagreeable the ap-

pearances may have been ; or however high the symptoms may have risen, before suppuration ; yet, when that end is fairly and fully accomplished, the patient generally becomes easy and cool ; and the matter formed under such circumstances, though it may be plentiful, yet is good.

ON the other hand, the external parts, after much pain, attended with fever, sickness, &c. are sometimes attacked with considerable inflammation, but without any of that circumscribed hardness, which characterized the preceding tumor ; instead of which, the inflammation is extended largely, and the skin wears an erysipelatous kind of an appearance. In this, the disease is more superficial ; the quantity of matter small, and the cellular membrane sloughy to a considerable extent.

SOMETIMES, instead of either of the preceding appearances, there is formed in this part, what the French call *une suppuration gangreneuse* ; in which the cellular and adipose membrane is affected in the same manner, as it is in the disease, called a Carbuncle.

IN this case, the skin is of a dusky red, or purple kind of color; and, although harder than when in a natural state, yet it has, by no means, that degree of tension or resistance, which it has either in the phlegmon, or in the erysipelas.

THE patient has generally, at first, a hard, full jarring pulse, with great thirst, and very fatiguing restlessness. If the progress of the disease be not stopped, or the patient relieved by medicine, the pulse soon changes into an unequal, low, faultring one; and the strength and the spirits sink in such manner, as to imply great and immediately-impending mischief. The matter formed under the skin so altered, is small in quantity, and bad in quality; and the adipose membrane is gangrenous, and sloughy throughout the extent of the discoloration. This generally happens to persons, whose habit is either naturally bad, or rendered so by intemperance.

IN each of these different affections, the whole malady is often confined to the skin and cellular membrane underneath it; and no other symptoms attend, than the usual

general ones ; or such as arise from the formation of matter or floughs in the part immediately affected. But it also often happens, that added to these the patient is made unhappy by complaints arising from an influence, which such mischief has on parts in the neighbourhood of the disease ; such as the urinary bladder, the vagina, the urethra, the hæmorrhoidal vessels, and the rectum ; producing retention of urine, strangury, dysury, bearing down, tenesmus, piles, diarrhœa, or obstinate costiveness : which complaints are sometimes so pressing, as to claim all our attention. On the other hand, large quantities of matter, and deep floughs are sometimes formed, and great devastation committed on the parts about the rectum, with little or no previous pain, tumor, or inflammation.

SOMETIMES the disease makes its first appearance, in an induration of the skin near to the verge of the anus ; but without pain or alteration of color ; which hardness gradually softens and suppurates : the matter, when let out, in this case, is small in quantity, good in quality ; and the sore is superficial, clean, and well-conditioned. On the contrary, it now and then happens, that

that although the pain is but little, and the inflammation apparently slight; yet the matter is large in quantity, bad in quality, extremely offensive, and proceeds from a deep, crude hollow, which bears an ill-natured aspect.

THE place also where the abscess points, and where the matter, if let alone, would burst its way out, is various, and uncertain. Sometimes it is in the buttock, at a distance from the anus; at other times near its verge, or in the perineum: and this discharge is made sometimes from one orifice only, sometimes from several. In some cases, there is not only an opening through the skin externally, but another through the intestine into its cavity: in others, there is only one orifice, and that either external, or internal.

SOMETIMES the matter is formed at a considerable distance from the rectum, which is not even laid bare by it; at others, it is laid bare only, and not perforated: it is also sometimes not only denuded, but pierced; and that in more places than one. The original seat of the mischief is, in some cases, high up in the pelvis, near the

lower vertebrae of the loins, and the os sacrum; and the matter comes from parts so diseased, and so out of reach, that the case is hopeless from the first. These discharges are to some persons salutary, and prove solutions of general diseases, which have long infested the habit: to others, they often prove fatal, by exhausting the small remains of strength. If the disease has its foundation in the lues venerea (which is not a very uncommon case) it frequently communicates with the urethra, and neck of the bladder, producing great disturbance and misery to the patient. And sometimes it happens, that fistulous openings near the anus give discharge to a sanies, proceeding from a cancerous state of some of the parts within the pelvis.

WHOEVER attends to this variety of states and circumstances, must be convinced, that no one particular method can suit them all; but that in this, as in many other cases, the surgeon's conduct must be varied occasionally, and adapted to the exigencies of each individual.

S E C T. III.

IT very seldom happens, when inflammatory defluxions are made on the cellular membrane surrounding the intestine rectum, that it is in our power to prevent the formation of matter; nor if it was, would it often be right so to do, as these abscesses seldom happen to any body, to whom they are not, at least, a temporary relief.

ALL consideration, therefore, of that kind is generally out of the question: and our business, if called to it at the beginning, must be to moderate the symptoms; to forward the suppuration; when the matter is formed, to let it out; and to treat the sore in such manner, as shall be most likely to produce a speedy and lasting cure.

WHEN there are no symptoms, which require particular attention, and all that we have to do is to assist the maturation of the tumor, a soft pultice is the best application. When the disease is fairly of

the phlegmonoid kind, the thinner the skin is suffered to become, before the abscess be opened, the better; as the induration of the parts about will thereby be the more dissolved; and, consequently, there will be the less to do, after such opening has been made. This kind of tumor is generally found in people of full, sanguine habits; and who, therefore, if the pain be great, and the fever high, will bear evacuation, both by phlebotomy, and gentle cathartics: which is not often the case of those, who are said to be of bilious constitutions; in whom the inflammation is of larger extent, and in which the skin wears the yellowish tint of the erysipelas; persons of such kind of habit, and in such circumstances, being in general seldom capable of bearing large evacuation.

THE observation is general, with regard to erysipelatous inflammations in any part of the body, and is by no means confined to this,

I MAY, possibly, be censured, for stepping out of my way to mention it; but it is a truth of so much importance to many
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and I have seen such melancholy instances from its being not known, or not attended to, that my intention must plead my excuse.

THIS kind of inflammation (I mean the erysipelatous) generally makes its attack with nausea, vomiting, slight rigor, heat, thirst, and restlessness.

THE quickness of pulse, and heat of skin, are indications for some degree of evacuation, and indeed sometimes render it requisite; but it is a very prevailing opinion with many practitioners, that these evacuations should be freely made, and frequently repeated: in short, that the cure of this kind of inflammation is safely to be effected by them; which is so far from being true, that the practice has proved fatal to many. If, for instance, blood be drawn off in such quantity, as that the patient's pulse sinks suddenly; or if his strength be considerably reduced by purging, it is no very uncommon thing for the inflammation to leave the part first affected, and for such complaints to come on immediately, as soon prove destructive, and afford no opportunity to re-
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pair the mischief, which the evacuation has produced.

WHEN the inflammation is of this kind, the quantity of matter formed is small, compared to the size and extent of the tumor; the disease is rather a sloughy, putrid state of the cellular membrane, than an impostumation; and, therefore, the sooner it is opened, the better: if we wait for the matter to make a point, we shall wait for what will not happen; at least not till after a considerable length of time: during which, the disease in the membrane will extend itself, and, consequently, the cavity of the sinus, or abscess, be thereby greatly increased.

WHEN, instead of either of the preceding appearances, the skin wears a dusky, purplish-red color; has a doughy, unresisting kind of feel, and is very little sensible: when these circumstances are joined with an unequal, faulting kind of pulse; irregular shiverings; a great failure of strength and spirits, and inclination to doze, the case is formidable, and the event generally fatal.

THE habit, in these circumstances, is always bad ; sometimes from nature, but much more frequently from gluttony and intemperance. What assistance art can lend, must be administered speedily ; every minute is of consequence ; and if the disease be not stopped, the patient will sink. Here is no need for evacuation of any kind ; recourse must be immediately had to medical assistance ; the part affected should be frequently fomented with hot spirituous fomentations ; large and deep incision should be made into the diseased part ; and the applications made to it, should be of the warmest most antiseptic kind.

THIS also is a general kind of observation ; and equally applicable to the same sort of disease in any part of the body. Our ancestors have thought fit to call it in some a Carbuncle, and in others by other names ; but it is (wherever seated) really and truly, a gangrene of the cellular, and adipose membrane : it always implies great degeneracy of habit, and, most commonly, ends ill.

STANGURY, dysfury, and even total retention of urine, are no very uncommon attendants upon abscesses forming in the neighbourhood of the rectum and bladder; more especially, if the seat of them be near the neck of the latter.

THEY sometimes continue from the first attack of the inflammation, until the matter is formed, and has made its way outward; and sometimes last a few hours only.

THE two former most commonly are easily relieved by the loss of blood, and the use of gum arabic, with nitre, &c. But the last (the total retention) is, (while it continues) both fatiguing and alarming.--- They, who have not often seen this case, generally have immediate recourse to the catheter; and for this, they plead the authority of precept; but the practice is so essentially wrong, and I have seen such terrible consequences from it, that I cannot help entering my protest against it.

THE neck of the bladder, from its vicinity to the parts where the inflammation

is seated, and from its being involved in the same common membrane, does certainly participate, in some degree, of the said inflammation. This will, in some measure, account for the complaint; but whoever considers the extremely irritable state of the parts composing that part of the urethra, (if I may be allowed so to call it) and will, at the same time, reflect on the amazing and well-known effects of irritation, will be convinced that the principal part of this complaint arises from that cause; and that the disease is, strictly speaking, spasmodic. The manner, in which an attack of this kind is generally made; the very little distention, which the bladder often suffers; the small quantity of urine sometimes contained in it, even when the symptoms are most pressing; and the most certain, as well as safe, method of relieving it; all tend to strengthen such opinion.*

BUT

* Great and acute as the pain is in the neck of the bladder, and about the pubes, in a retention of urine, it is not greater, nor more acute, than is sometimes felt in the same parts, by those, in whose bladder no urine is to be found, and in whom the catheter may be passed with very little trouble or resistance. This complaint,
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BUT whether we attribute the evil to inflammation, or to spasmodic irritation, whatever can, in any degree, contribute to the exasperation of either, must be palpably and manifestly wrong. The violent passage of the catheter through the neck of the bladder (for violent in such circumstances it must be) can never be right. I will not say, that it never succeeds; but I will say, that it can hardly ever be proper to make the attempt.

IF the instrument be successfully introduced, it must either be withdrawn as soon as the bladder is emptied; or it must be left in it: if the former be done, the same cause of retention remaining, the same effect returns; the same pain and violence must be again submitted to, under (most likely) increased difficulties. On the other hand, if the catheter be left in the bladder, it will often, while its neck is in this state, occasion such disturbance, that the remedy (as it is called) will prove an exasperation of the disease, and add to the evil
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which I have more than two or three times seen, is truly spasmodic; and, accordingly, always gives way to opium, more especially if used in the form of glyster.

it is designed to alleviate ; nor is this all ; for the resistance, which the parts, while in this state, make, is sometimes so great, that if any violence be used, the instrument will make for itself a new rout in the neighbouring parts, and lay the foundation of such mischief, as frequently baffles all our art.-----An accident, which I have known happen to those, whose judgment and dexterity have never been doubted.

THE true, safe and rational method of relieving this complaint, is by evacuation and anodine relaxation ; this not only procures immediate ease, but does, at the same time, serve another very material purpose ; which is that of maturing the abscess. Loss of blood is necessary ; the quantity to be determined by the strength and state of the patient : the intestines should also be emptied, if there be time for so doing, by a gentle cathartic ; but the most effectual relief will be from the warm bath, or semicupium, the application of bladders with hot water to the pubes and perineum ; and, above all other remedies, the injection of glysters, consisting of warm water, oil, and opium. There may have been cases, which have resisted and baffled this
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method of treatment; but I have never met with them.

ON the other hand; I have seen so great and permanent mischief, from the premature and indiscreet use of the catheter, that it would have been better for the patient to have sunk under the first evil, than to have lived to experience that variety of misery, to which all they are subject, who are afflicted with a diseased or injured neck of the bladder.

A PAINFUL tenesmus is no uncommon attendant upon an inflammatory defluxion on the parts about the rectum. The frequent use of the muscles, whose office it is to expel from the gut, whatever is troublesome to it, and by whose action, the parts, which make the seat of the disease, must be continually compressed, make this, while it lasts, a very disagreeable complaint.

IF a dose of rhubarb, joined with a warm anodyne, such as the conf. mithrid. or such-like, does not remove it, the injection of thin starch and opium, or tinct. thebaic. is almost infallible.

THE bearing down, as it is called, in females, as it proceeds, in this case, from the same kind of cause (*viz.* irritation) admits relief from the same means as the tenesmus.

IN some habits, an obstinate costiveness attends this kind of inflammation, accompanied, not unfrequently, with a painful distention, and enlargement of the hæmorrhoidal vessels, both internally and externally. While a quantity of hard fæces are detained within the large intestines, the whole habit must be disordered; and the symptomatic fever, which necessarily accompanies the formation of matter, must be considerably heightened. And while the vessels surrounding the rectum (which are large and numerous) are distended, all the ills proceeding from pressure, inflammation, and irritation, must be increased. This is too obvious, to need any explanation; and it must be as obvious, that phlebotomy, laxative glysters, and a low, cool regimen must be the remedies; while a soft cataplasm applied externally serves to relax and mollify the swollen, indurated piles,

at the same time that it hastens the suppuration.

THESE are, I think, the most material of the complaints, which attend inflammatory defluxions, and formations of matter about the anus and rectum. They are indeed most of them symptomatic, or accessory to the original disease; but they are frequently of such immediate consequence to the ease, and sometimes even to the safety of the person afflicted, that they require all our attention. Whoever neglects or mistreats them, will cause his patient to suffer a great deal of unnecessary pain, fatigue, and even hazard: whoever attends to, and treats them properly, will find that by relieving and appeasing these accidental ills, he will assist the cure of the principal complaint, and gain time, instead of losing it.

S E C T. IV.

L E T us now consider this disease, when the first symptoms attending the inflammation are gone off; and matter is either formed and collected, in such manner as to be fit for a surgeon to give discharge to it: or, (that opportunity having been avoided or neglected), it has burst through the parts containing it, and has made its own way out.

THE different states and circumstances produced either by the collection of this matter, or by the manner in which it has made its escape, will necessarily occasion a difference in the manner of treating the case; and may, for method-sake, as well as for the more perfectly understanding the true nature of the disease, be reduced to two general heads; *viz.*

I. THOSE, in which the intestine is not at all interested; and,

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2. THOSE,

2. THOSE, in which it is either laid bare, or perforated.

LET us first suppose the matter to be fairly formed; to have made its point, as it is called; and to be fit to be let out.

WHERE such point is, that is, where the skin is most thin, and the fluctuation most palpable, there the opening, most certainly, ought to be made.

SOME of our predecessors, either from a fear, which almost necessarily accompanies the want of anatomical knowledge; or from an awkwardness attending the disuse of a cutting instrument; adopted the method of opening these (as well as most other abscesses) by caustic.

WITH all due deference to authority, I will venture to say, that it is in general wrong; and particularly so in the present case.

IT often gives unnecessary pain; and it produces a loss of substance, and a kind
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of cicatrix, which is not only unseemly, but frequently proves a lasting inconvenience.

SOME of the patrons of potential fire, do, indeed, give a specious kind of reason for its use; *viz.* that it makes a more large and free opening for the discharge; and that, by the time the eschar is separated, the hollow underneath is generally more than half filled up.

IN a few, (very few) particular cases, where the destruction of glandular parts may become necessary, after the eschar is thrown off, (as in the case of venereal bubos) there may be some force in this argument; and caustics may be found useful; but in the present case, and in most others, in which they are freely and frequently applied, they appear to me to be highly improper; as they necessarily occasion a loss of parts, and a kind of eschar; which is, in general, an indelible blemish, to say no worse. And with regard to the particular circumstance of the hollow being filled almost up, by the time the eschar is separated, if the sur-

geon will dress an abscess, opened by incision, in the same easy, superficial manner, he does one opened by caustic, he will find the consequence to be the same. But, I know not why, a notion has long prevailed, that an abscess opened by a knife must be immediately crammed, and stuffed with dressings, while that, on which a caustic has been applied, must be let alone, until the eschar casts off. Let the one be treated as the other is, (and as they both ought to be) and the event will be found to be alike in each : excepting this material difference in favor of the knife, that it will not necessarily occasion any destruction of parts, loss of substance, nor any deformity, which is at all comparable with what must follow the use of the caustic.

IN making the opening, the knife, or lancet should be passed in deep enough to reach the fluid ; and, when it is in, the incision should be continued upward, and downward *, in such manner as to divide all the skin covering the matter. By these means,

* When I say upward and downward, I suppose the patient to stand on his feet, with his legs and thighs straight,

means, the contents of the abscess will be discharged at once ; future lodgment of matter will be prevented ; convenient room will be made for the application of proper dressings ; and there will be no necessity for making the incision in different directions ; or for removing any part of the skin composing the verge of the anus.

NOTWITHSTANDING that all these collections of matter are generally called by the name of *Fistulæ*, and are all supposed to affect the *intestinum rectum*, yet, it is very certain, that the seat of the abscess, (the place where the matter is formed) is, sometimes, at such distance from the gut, that it is not at all interested by it ; and that none of these cases either are, or can be originally *fistulæ*.

IN this state of the disease, we have no more necessarily to do with the intestine, than if it was not there ; the case is to be considered merely as an abscess in the

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straight, and his body leaning forward over a table, or a bed ; which posture gives the fairest view of the parts ; and puts them into the best position for the operation, as well as for the operator.

cellular membrane; which will require (in the usual phrase) to be digested, incised, and (if practicable) healed, without meddling with the rectum in any manner.

As this is a matter of some importance to the patient, it is worth a little consideration.

SUPPOSE an abscess formed in the neighbourhood of the rectum, which, after a certain degree of swelling and inflammation, ripens, or comes to a point, somewhere near to the verge of the anus. Suppose also a large and convenient opening to have been made by a simple incision; the contents of the abscess to have been thereby discharged; and a sore or cavity produced, which is, perhaps, considerable in size: this cavity is to be filled up in such manner, as to produce a firm and lasting cure.

THE frequent use of the term filling up, and the generally received opinion, that the induration of the parts about is a diseased callosity, appear to me to have been the

two principal sources of error and misconduct in these cases.

WHEREVER matter is formed in consequence of inflammation, it always leaves, upon being let out, a proportional hollow, and some degree of induration. The former of these is of different size, according to the quantity of matter; and the latter depends both on the degree of previous inflammation, and the more or less perfect suppuration of the abscess.

THE generally received opinion, with regard to these two circumstances (hollow and hardness) is, that the former is caused entirely by loss of substance; and the latter (as I have already observed) by diseased alteration in the structure of the parts.

THE consequence of which opinion is, that as soon as the matter is discharged, the cavity is filled and distended, in order to procure a gradual regeneration of flesh; and the dressings, with which it is so filled, are most commonly, of the escharotic kind, intended for the dissolution of hardness.

THE practice is a necessary consequence of the theory. Whoever supposes diseased callosity, and great loss of substance, will necessarily think himself obliged to destroy the former, and to prevent the cavity formed by the latter, from filling up too hastily. On the other hand, he, who considers this matter as it really is; that is, he, who regards the cavity of the abscess, as being principally the effect of the gradual distraction and separation of its sides, with very little loss of substance, compared with the size of the said cavity; and who looks upon the induration round about, as nothing more than a circumstance which necessarily accompanies every inflammation in membranous parts; more especially in those, which tend to suppuration; will, upon the smallest reflection, perceive, that the dressings applied to such cavity ought to be so small in quantity, as to permit nature to accomplish that end, which she always aims at, as soon as the matter is let out: (I mean, the approach of the sides of the cavity toward each other :) and that such small quantity of dressings ought

ought to consist of materials proper only to encourage easy and gradual suppuration.

THIS is a fact so obvious to common sense, that it must appear to every one who will coolly and impartially consider it.

WHAT is the part, in which the disease is seated? and what are the alterations, which such disease produces? The part is mere cellular membrane; and the alteration is obstruction and inflammation, ending in the formation of matter. But do these create any new body? do not the sides of the abscess still remain cellular and adipose membrane, only inflamed, thickened, hardened, and rendered purulent? can such alteration require any thing more toward restoring the parts to a natural state, than a free suppuration from the parts so altered? or, can it make extirpation or destruction necessary? Most certainly, it cannot. How then is suppuration to be produced and maintained? Not by thrusting in such applications, as by their quantity distend, and by their quality irritate and destroy; but by dressing
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lightly, and easily, with such as appease, relax, and soften.

THE fact is capable of experiment ; and every man who will make it, that is, who will try the different methods, and attend to the consequences, must be able to determine it ; unless blinded by prejudice, or influenced by a worse motive.

A MOMENT'S attention to the conduct of nature, when left to herself, and not interrupted by art, will, perhaps, set this matter in a clearer light.

WHEN an abscess of this kind is opened by a surgeon, the cavity is found proportioned to the contents ; and, consequently, if the quantity of matter be large, the hollow is considerable. If this hollow be immediately filled with dressings, (of any kind) the sides of it will be kept from approaching toward each other ; or may even be farther separated. But if this cavity be not filled, or have little or no dressings of any kind introduced into it, the sides immediately collapse ; and, coming nearer and nearer, do, in a very short space of time,

time, convert a large hollow into a small sinus. And this is also constantly the case, when the matter, instead of being let out by an artificial opening, escapes through one made by the bursting of the containing parts.

It is indeed true, that this sinus will not always, (and particularly in the disease I am now speaking of) become perfectly close, and heal; but the aim and conduct of nature is not, therefore, the less evident; nor the hint, which art ought to borrow from her, the less palpable.

In this, as in most other cases, where there are large sores, or considerable cavities, a great deal will depend on the patient's habit, and the care that is taken of it; if that be good, or if it be properly corrected, the surgeon will have very little trouble in his choice of dressings; all that he will have to do, will be, to take care that they do not offend either in quantity or quality: but if the habit be bad, or injudiciously treated, he may use the whole farrago of externals, and only waste his own and his patient's time.

IN short, all these cases are, at first, mere abscesses ; the consequences of inflammation, and require no other treatment, than what would be proper in the same kind of case in all other parts. Some few of them are so circumstanced, with regard to the intestine, that it is quite unnecessary to meddle with it at all : but whether that be the case, or not ; whether the division of the rectum become a necessary part in the cure, or not ; they, most certainly, do not deserve the name of fistulæ ; nor require that sort of treatment which fistulæ are said, and thought, to stand in need of : though, by being from their very first appearance supposed to be such, they are frequently, by mismanagement rendered truly fistulous.

By this, (that is, by light, easy treatment) large abscesses, formed in the neighbourhood of the rectum, will sometimes be cured, without any necessity occurring of meddling with the said gut. But it much more frequently happens, that the intestine, although it may not have been pierced, or eroded by the matter, has yet been so stript, or denuded, that no consolidation of
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the sinus can be obtained, but by a division ; that is, by laying the two cavities, *viz.* that of the abscess, and that of the intestine, into one.

THE necessity of doing this, may, in many cases, be known by the surgeon, at first ; that is, when he opens the abscess, he may find the intestine so bare, and in such state, as plainly to prove, that he will not be able to effect a cure without the operation : in other instances, he may have reason, at first, to flatter himself with success and be disappointed.

WHEN the former is the case ; when the gut is found to be in such state, that there is no reason to expect a cure, without its being divided ; that operation had better (on many accounts) be performed, at the time the abscess is first opened, than be deferred to a future one. For if it be done in the manner, in which, I will venture to say, that it always may, it will add so little to the pain, which the patient must feel by opening the abscess, that he will seldom be able to distinguish the one from the other, either with regard to time or sensation:

tion: whereas, if it be deferred, he must either be in continual expectation of a second cutting, or feel one, at a time when he does not expect it.

THE intention, in this operation, is to divide the intestine rectum, from the verge of the anus, up as high as the top of the hollow in which the matter was formed; thereby to lay the two cavities of the gut and abscess into one; and, by means of an open, instead of a hollow, or sinuous sore, to obtain a firm and lasting cure.

INGENIOUS, mechanical, and whimsical people* have often busied themselves, in inventing instruments for this purpose: the syringotomy, the cultellus falcatus, the probe-razor, &c. have all at times been in use; scissars also of various kinds, both straight and crooked, have been employed in this operation: the three first may be made to serve the purpose very well; but to the last, (the scissars) there is in this, as
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* The late Mr. Freeke invented an instrument for this purpose; but it was, upon trial, found to cut the operator's finger, with so much more certainty than the patient's intestine, that it has long been laid aside.

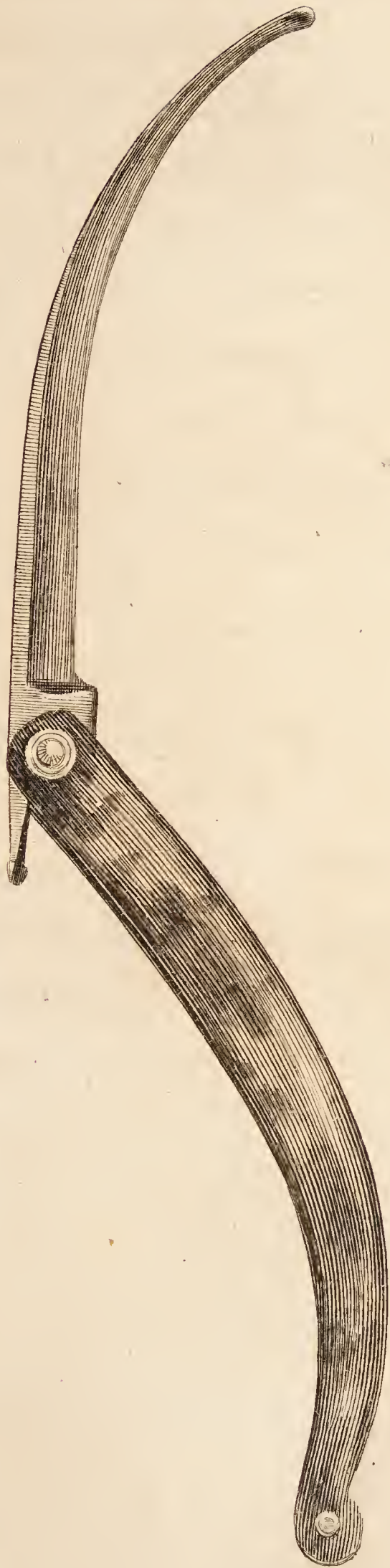
well as in almost every operation, in which they are frequently used, a palpable objection, *viz.* that, by pinching at the same time that they cut, they occasion a great deal of unnecessary pain. They are, I know, in great use with many, who, if they were deprived of their probe-scissars, would think themselves incapacitated from doing business; but they are, upon all occasions where mere division is required, a very bad instrument; they may assist an awkward, or an unsteady hand, but are more fit for a farrier, than for a surgeon.

IN all chirurgic operations, the instrument made use of cannot be too simple, nor too keen; and, if possible, should never be out of the sight, or the direction of the finger of the operator; and, whenever it is, (as must sometimes necessarily be the case) it is liable to some degree of uncertainty. Scissars introduced into the rectum are always in this predicament; and are, therefore, (as well as on account of their pinching quality,) bad.

THE curved, probe-pointed knife, with a narrow blade, I have always found to be the most useful and handy instrument of
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any. This introduced into the sinus, while the surgeon's fore-finger is in the intestine, will enable him to divide all that can ever require division ; and that with less pain to the patient, with more facility to the operator, as well as with more certainty and expedition than any other instrument whatever. If there be no opening in the intestine, the smallest degree of force will thrust the point of the knife through, and thereby make one : if there be one already, the same point will find and pass through it. In either case, it will be received by the finger in ano ; will thereby be prevented from deviating ; and being brought out by the said finger, must necessarily divide all that is between the edge of the knife, and the verge of the anus : that is, must by one simple incision, (which is made in the smallest space of time imaginable) lay the two cavities of the sinus, and of the intestine, into one.

AUTHORS make a very formal distinction, between those cases in which the intestine is pierced by the matter, and those in which it is not ; but although this distinction may be useful, when the different states of the disease are to be described, yet



yet in practice, when the operation of dividing the gut becomes necessary, such distinction is of no consequence at all; it makes no alteration in the degree, kind, or quantity of pain, which the patient is to feel; the force required to push the knife through the tender gut, is next to none; and, when its point is in the cavity, the cases are exactly similar.

THIS is the only operation, which (in the circumstances under our present consideration) ever can be necessary: and this appears to me, to be the safest, easiest, and most expeditious method of performing it.

I KNOW, that it is contrary to the opinion and practice of many; who think that the removal of some part, both of the intestine, and of the verge of the anus, is necessary in these cases: but long and repeated experience has convinced me of the contrary; and I shall, in the next section, have occasion to speak more particularly to that point.

IMMEDIATELY after the operation, a soft doffel of fine lint should be introduced

(from the rectum) between the divided lips of the incision; as well to repress any slight hæmorrhage, as to prevent the immediate re-union of the said lips; and the rest of the sore should be lightly dressed with the same. This first dressing should be permitted to continue, until a beginning suppuration renders it loose enough to come away easily; and all the future ones should be as light, soft, and easy as possible: consisting only of such materials, as are likely to promote kindly and gradual suppuration. The sides of the abscess are hard; the incision must necessarily, for a few days, be inflamed; and the discharge will, for some time, be discolored, and gleety: this induration, and this sort of discharge, are often mistaken for signs of diseased callosity, and undiscovered sinuses; upon which presumptions, escharotics are freely applied, and diligent search is made for new hollows; the former of these most commonly increase both the hardness and the gleet; and by the latter new sinuses are sometimes really produced. These occasion a repetition of escharotics, and, perhaps, of incisions; by which means, cases, which, at first, and in their own nature, were simple and easy of cure, are rendered complex and tedious.

THAT this is the truth, without exaggeration, is well known to many; and whoever will look over the writings of some of our immediate predecessors, or even of some of our contemporaries, will find, that, immediately after pinching and snipping the gut with scissars, we are directed to fill the incisions with lint; and, after having distended the cavity by such means, to dress, in future, with such medicines, as, though used under the specious names of digestives, detergents, &c. do really inflame and irritate the parts, to which they are applied, and retard, instead of encouraging, a kindly suppuration.

AMONG these, the mercurius præcipitatus ruber stands principal: this seems to have been the great external specific of most of our immediate predecessors, and to have been used by them, for the very different purposes of destruction and restoration: with this, either in dry powder, or mixed with unguent, the tents, pledgits, &c. with which they dressed these sores, were spread or embued; with this they dressed the recently-divided lips of the wound in the intestine;

and with this they filled the whole cavity of the abscess.

THAT the same practice still too much prevails, they who please, may be convinced.*

I would beg leave to ask any patron of this method of dressing, what he would say to a man, who shall order a large tent, well charged with præcipitate, to be thrust up the undivided, unwounded rectum of a person, who, from any cause whatever, had an inflammatory defluxion on the hæmorrhoidal vessels, and inside of the said gut? Would he not say, that such tent would prove a fatiguing, inflaming suppository? and would he not be right in saying so? Is then the rectum rendered less sensible, and less irritable, by being wounded? Or, can that very application, which proves a painful stimulus to a gut not divided, become an easy digestive to one that is? If
any

* Mr. De la Faye says---“ Si les chairs s’elevent trop, on les consumera avec la pierre infernale;” and in many books of reputation the butyrum antimonii, the trochisci e minio, the pulvis angelicus, &c. are prescribed for frequent use.

any man thinks that it will, I would advise him to make the experiment on himself; and I would then appeal to the testimony of his own unprejudiced sensations.

IN short to quit reasoning, and speak to fact only. In the great number of these cases, which must have been in St. Bartholomew's-Hospital, within these ten or twelve years, I do aver, that I have not met with one, in the circumstances before described, that has not been cured by mere simple division, together with light, easy dressings : and that I have not, in all that time, used, for this purpose, a single grain of præcipitate, or of any other escharotic.

WHY is it, that we hear so much of miracles performed by the paste of one quack ? and by the injections, oils, and balsams of others ? when we all know, that there is nothing specific for the cure of this disease in their compositions : and, when we also know that the venders of these remedies are people, whose ignorance in matters of physic and surgery is below all notice.

THAT these cures are much more frequently talked of than made, I well know ; but that some few people, who have been long and unsuccessfully treated by surgeons, have got either well, or better, under the very negligent management of some of these quacks, is an incontestable truth ; and very strange it is, that we do not see why.

Fas est et ab hoste doceri :---

THE truth is ; that, while we are looking for what these people do, we (if I may be allowed the phrase) overlook what they do not do. It is true, we cannot find any specific quality in the strange jumble of ingredients which they put into their internal remedies ; nor any particularly-fanative one in their injections, balsams, &c. and therefore, are surprized at even the few instances of their success ; but still overlook the one single circumstance, by which the good is produced.

It is, and ever must be, a first principle in quackery, to disapprove and condemn
what-

whatever has been done before, be it right, or be it wrong: and it is also necessary for quacks, to avoid all connection with those who are called Regular Practitioners; as well in order to have the sole management of the patient, as to avoid inspection.

FOR these reasons, they always order all former dressings to be immediately thrown aside, and disused; and, not having in general ingenuity enough, even to seem to apply others, with any degree of judgment or dexterity, they make use of a mere superficial plaster, ointment, or injection: that is without intending any such thing, upon an honest, or a rational principle, they, for want of knowing what to do properly, leave the conduct of the sore to nature; who, when the impediment of dressings, (which often offend either in quantity or quality) are removed, will do much more than her too officious assistants believe.

THAT the very few cures, which we have heard so much of, are produced in this manner I am convinced; and so I am, that many of those, which are thought, by
several

several practitioners, to have been brought about by a multiplicity of dressings crammed in tight, and endeavoured to be kept so, by all the caution of compress and bandage, are very frequently effected by the constant and generally successful endeavours of nature, to thrust them forth again: or, at least, so to displace them, that she gradually gets opportunities of doing her own business, in spite of the impediments of art. The business of good surgery, is to assist nature; but she will, sometimes, get the better even of the worst.

*Usque recurret,
Et mala perumpet furtim fastidia victrix.*

S E C T. V.

IN the preceding Section, I have supposed the matter of the abscess to have been formed, and collected; but still to have been contained within the cavity, until let out from thence by an incision.

I AM

I AM now to consider it, as having made its own way out, without the help of art.

THIS state of the disease is also subject to some variety of appearance; and these different appearances have produced, not only a multiplicity of appellations, but a groundless supposition also, of a variety of essentially different circumstances.

WHEN a discharge of the matter by incision is too long delayed, or neglected, it makes its own way out, by bursting the external parts somewhere near to the fundament; or by eroding, and making a hole through the intestine into its cavity; or sometimes by both. In either case, the discharge is made sometimes by one orifice only, and sometimes by more. Those, in which the matter has made its escape by one or more openings, thro' the skin only, are called blind, external fistulæ; those, in which the discharge has been made into the cavity of the intestine, without any orifice in the skin, are named blind, internal; and those, which have an opening

opening both through the skin, and into the gut, are called complete fistulæ.

THIS is the language of all writers, as I have already observed: and thus, all these cases are deemed fistulous, when hardly any of them ever are so; and none of them necessarily. They are still mere abscesses, which are burst without the help of art; and, if taken proper and timely care of, will require no such treatment, as a true fistula may possibly stand in need of.

THE most frequent of all, are what are called the blind, external; and the complete. The method, whereby each of these states may be known, is, by introducing a probe into the sinus by the orifice in the skin, while the fore-finger is within the rectum: this will give the examiner an opportunity of knowing exactly the true state of the case, with all its circumstances.

WHETHER the case be what is called a complete fistula, or not; that is, whether there be an opening in the skin only, or
one

one there, and another in the intestine, the appearance to the eye is much the same. Upon discharge of the matter, the external swelling subsides, and the inflamed color of the skin disappears; the orifice, which at first was sloughy and foul, after a day or two are past becomes clean, and contracts in size; but the discharge, by fretting the parts about, renders the patient still uneasy.

As this kind of opening seldom proves sufficient for a cure, (though it sometimes does) the induration, in some degree, remains; and if the orifice happens not to be a depending one, some part of the matter lodges, and is discharged by intervals, or may be pressed out by the fingers of an examiner. The disease, in this state, is not very painful; but it is troublesome, nasty, and offensive: the continual discharge of a thin kind of fluid from it, creates heat, and causes excoriation in the parts about; it daubs the linen of the patient; and is, at times very foetid; the orifice also sometimes contracts so, as not to be sufficient for the discharge; and the lodgment of the matter then occasions fresh disturbance.

T

THE means of cure proposed, and practised, by our ancestors, were three, *viz.* caustic, ligature, and incision.

THE intention, in each of these, is the same, *viz.* to form one cavity of the sinus and intestine, by laying the former into the latter.

FEAR of hæmorrhage, in making a large division of parts, and a design to destroy callosity, gave rise to the use of caustics, for this purpose; by the introduction of them in different forms and manners into the sinus, that part of the intestine which divides its cavity from that of the abscess, is intended to be destroyed: and, thereby, the proposed end, of making one cavity of the two, is to be accomplished; while, at the same time, the supposed callosity is to be wasted. For this purpose, some of the most fatiguing and painful escharotics have been prescribed and used: the pulvis angelicus, the lapis infernalis, and troches and pastes made

made with sublimate, arsenic, &c. But the method is so cruel, so tedious, and so inexpert, that, I hope, it is, by this time, totally out of use: it was founded in error, tends only to mischief; and I will not waste the reader's time, in saying any thing more about it.*

THE terror, which a cutting instrument necessarily carries with it; the fear of a flux of blood from some considerable vessels, together with a strange, nonsensical opinion, that a gradual division of the parts was followed by a more sound cure, than an immediate one by cutting, produced the coarse, unhandy method by ligature. The manner of using it was this. A probe, or needle, (according to the complete or incomplete state of the supposed fistula) armed with a strong ligature, was introduced, either naked or in a cannula, by

* Doctor Daniel Turner, who practised surgery within these few years, used this method in its full extent. In his works may be found, an account of his forming tents of the trochisci e minio; and thrusting them into the sinus, there to remain till they had produced a sufficient eschar. In the same writer are accounts of strong probe-scissars, made to cut through

by the orifice in the buttock, and brought out at the anus, by the operator's finger : when that was done, the two ends of the said ligature were tied together, in such manner, and at such repeated times, as, by degrees, to cut through all that was between its loop, and its knot ; that is, all that part of the intestine, which was next to the sinus.

AMONG writers on this subject, will be found very formal directions, about the proper time of the year for performing this operation ; as well as concerning the proper materials wherewith to make the ligature. But as the whole operation is, on

through parts of a considerable thickness ; and where the external orifice was at a great distance from the anus : and of an iron scoop, made (to use the Doctor's own words) like a cheese-monger's taster, to be thrust up the rectum, and assist in the division of it. What ideas this gentleman had of the disease, or of human sensation, I cannot imagine. The same gentleman, speaking of the use of this iron scoop, tells us, that when he used it on one particular patient, the man thought that the Doctor was only thrusting up the dressings. It is no difficult matter to conceive what kind of dressings this man must have been accustomed to, who could not distinguish between the application of them, and the thrusting up an iron scoop.

on every principle of ease, expedition, safety, or certainty, unfit for practice, it would be an abuse of the reader's patience to dwell any longer upon it.*

THE third method is that by incision.

I HAVE already given my opinion, on what appears to me to be the best and most proper method of dividing the intestine, in the case of a collection of matter formed juxta anum.

THE intention to be aimed at by incision, in the present case, is exactly the same, and (I think) ought to be executed,
in

* See Celsus, whose account of the method by ligature has been followed by most of the writers since.

“ In has demisso specillo, ad ultimum ejus caput incidi cutis debet; dein novo foramine specillum educi lino sequente; quod in aliam ejus partem, ob id ipsum perforatam, conjectum sit: ibi linum apprehendendum, ligandumque cum altero capite est; ut laxè cutem, quæ super fistulam est, teneat: idque linum debet esse crudum, & duplex, triplexve, sic tortum ut unitas in eo facta sit. Interim autem licet negotia agere, ambulare, lavare, cibum capere, perinde atque sanissimo,” &c.

in the same manner. I never saw, that any other kind of operation was necessary; I have not, for many years, performed any other; and I do not recollect a single instance, in which it has failed to produce a cure, in such cases as were curable by any means.

IF, therefore, I intended to give my own opinion merely on this subject, I should say, the same division of the intestine, and with the same instrument, is all that is required; and, referring my reader back to the preceding section, should give him no farther trouble on this head. But as I find my sentiments in this matter are somewhat different from those of many, I must beg leave to be indulged in the use of a few words.

I HAVE said, that in whatever manner, or with whatever instrument, the intestine be divided, the intention is the same, *viz.* to lay the cavity of the abscess into that of the gut; and, thereby to convert a hollow sinous sore, into an open one; preventing, by the same means, the fu-
ture

ture lodgment of matter, and giving room for the application of proper dressings.

THE two cases (a collection of matter, and a sinus) seem to me to require exactly the same treatment; and I have never found it fail, of being equally successful in both; that is, I never found, that the matter, having found its own way out, made any other operation on the gut, except the mere simple division, at all necessary.

BUT it is said, and that by authors to whom great regard is due, that this is not all that is requisite, especially in the present circumstances; that this will not produce a cure, or assure success; that mere division of the intestine is not sufficient; and that, unless we cut out, remove, and extirpate a portion both of the said intestine, and the skin constituting what is called the verge of the anus, a firm and lasting cure will not follow. This is the doctrine of writers of eminence, and the practice of a large body of surgeons.

WHEN I have mentioned the names of Chefelden, De lay Faye, and le Dran, I need not cite any others of less note. The first of these was a gentleman, whose reputation in his profession was great; the two latter are in as high character now in France. The influence of these upon their readers must be considerable; and, therefore, it becomes a matter of the more importance, that their doctrine be just and defensible.

THE methods which these gentlemen have proposed, and which have been by many adopted, are somewhat different from each other; but do all tend to the same purpose; are all calculated to prevent imaginary evils; and are all productive of real ones.

MR. Chefelden, in the last edition of his Anatomy, says,---“ The true fistula runs
 “ between the muscular and inner coat
 “ of the rectum: it is cured, by opening it
 “ the whole length into the cavity of the
 “ gut: but it is yet better, if it can be
 “ done, to extirpate all that is fistulous
 and

“and scirrhus ; for that is a sure way, to
 “ make one operation perfect the cure.”

IN his observations, published at the end of Mr. Gataker's translation of Le Dran's surgery, Mr. Chelfeden describes a method of his own inventing, by the introduction of one blade of a pair of polypus-forceps into the sinus, and of the other into the rectum. By which means, a certain portion of the intestine is held fast, between the chops of the instrument, in order to be cut out with the scissars.

AFTER having giving an explanation of a plate, designed to represent the forceps introduced in such a manner as to hold the piece of intestine fast, he adds,---
 “ I formerly cut out a pyramidal piece in
 “ the manner here described ; but I find
 “ this way with the forceps much more
 “ convenient, and more easy to be executed.

How much this method may be preferable to that, which Mr. Chelfeden used

to practise, I know not; but I will venture to say, that this more easy method is horridly painful, is operose, and absolutely unnecessary towards obtaining a cure.

THE wound, that is, the orifice of the sinus in the buttock, is, by Mr. Cheselden's direction, to be first dilated with a sponge tent; then one of the blades of a pair of large polypus-forceps is to be thrust up the sinus, while the other within the intestine pinches it between them; and then, this piece so pinched is to be snipped out by the repeated attacks of a pair of scissars. A very tedious, and very painful, operation this must necessarily be; and by Mr. Cheselden's own account, not always successful: for, although he does
 “ say,---“ The operation being thus per-
 “ formed, I have never found wanting a
 “ second cutting:” yet, he immediately
 adds,---“ If, after this operation, there
 “ is still an internal discharge into the gut,
 “ it may be an useful issue; and continue
 “ the benefit which nature designed by
 “ the

“ the disease*. We should also be very
 “ careful not to perform it, when the pa-
 “ tient is troubled with the piles ; for I
 “ have known one, in that case, bleed to
 “ death.”

IT would be no difficult matter, to make great objections to this method of operating, even if the one thing intended by it was necessary ; I mean, the extirpation of a portion of the rectum : this end might, certainly, be obtained by easier means : but, as that is not the case, as such extirpation appears to me to be totally unnecessary, I shall not enter into it.

Mr. De la Faye, a practitioner and writer of eminence in France, and a gentleman

E 4

man

* This is a method of making an issue, to which few people would (I believe) chuse to submit : especially, if they consider, that they might have enjoyed all the benefit of it, without any operation at all ; merely by leaving their disease to nature. The same gentleman, speaking of the intestine rectum, tells us, that he once applied a caustic lengthways on the inside of the inverted gut, to cure a prolapsus : and adds, that it proved successful. This I am almost sorry for ; lest Mr. Cheselden's authority should attempt any other person to make the same attempt.

man to whom the chirurgic world is much indebted, is a warm patron of the practice of cutting away both a part of the intestine, and of the skin composing the verge of the anus. After the external incision necessary for letting out the matter has been made, he says,---“ Si les pus a
 “ fait un progres considerable du cote de
 “ la fesse, on y fera une autre incision,
 “ qui tombera perpendiculairement sur l’
 “ incision longitudinale; on coupera les
 “ angles formez par ces incisions, pour
 “ rendre l’exterieur de la playe plus large
 “ que le fond, & pour panfer plus aise-
 “ ment.” ‘ If the matter has extended
 ‘ itself considerably toward the buttock,
 ‘ another incision should be made, in such
 ‘ manner as to cross the former; the an-
 ‘ gles formed by which incisions should
 ‘ be cut away: as well to render the
 ‘ external part of the wound larger than
 ‘ the internal, as to give room for the
 ‘ more convenient application of dressings
 ‘ to the sore,’

IF Mr. De la Faye had ever, in his own person, had the misfortune to experience the inconvenience arising from the loss of

skin near to the fundament ; or had he attended to that which it produces to those, who either from choice, or necessity, ride or walk much, I am inclined to believe he would have been more sparing of it.

FOR the first three or four days, this kind of incision does, certainly, render the applications of dressings more convenient ; because the wound is thereby considerably enlarged ; but, as soon as digestion has softened the edges of the single perpendicular incision, that difference ceases ; and the dressings may be applied with equal facility to the one as to the other.

AFTER this period is past, the difference between the two is, indeed, much more considerable ; the cutting away the angles, adding not a little to the length of time requisite for a cure ; rendring the sore much larger, and more troublesome ; and subjecting the patient, very often, to great inconvenience, arising from the kind of cicatrix which it necessarily produces.

MR.

MR. De la Faye, after having described the manner of passing the probe, or the fulcated director, in order to make a simple longitudinal division of the intestine,
 “ adds,---On ne se contente pas aujourd-
 “ hui de couper la fistule entre les deux
 “ extrémités du stilet ; on fait une inci-
 “ sion qui renferme dans son circuit ces
 “ deux extrémités : et par le moyen de
 “ laquelle, en les tirant en même temps,
 “ on emporte toute la fistule, qui se trouve
 “ comme embrochée dans l'anse formée
 “ par cette instrument : * on fait ensuite
 “ a

* It might be supposed, from the manner in which this is delivered, that the method was a modern invention : whereas it is, on the contrary, a very old one. Guido's description of it is as follows.---

“ Penetrantes fistulæ (secundum Rhazin) non sanan-
 “ tur, nisi cum ligatione, et extractione cum falce.

“ Modus incisionis cum falce est, quod extraha-
 “ tur cum chordula immissa extra quantum possibile
 “ erit intestinum comprehensum per ipsam chordu-
 “ lam ; et post intromittendum positum ab Albucasi
 “ bene scindens ; totum illud, quod comprehensum
 “ est cum chordulâ scindatur ; ita, quod chordula
 “ expediatur.”

GUIDO.

So

“ a la partie inferieure de la playe, une
 “ incision, qui sert comme de gouttiere à
 “ la suppuration.” ‘ The present practi-
 ‘ tioners do not content themselves with
 ‘ merely dividing the sinus ; but making
 ‘ use of the probe as a kind of loop,
 ‘ they pull the parts towards them ; and
 ‘ then, by a free and almost circular inci-
 ‘ sion, cut out the whole fistula ; after
 ‘ which, they make such an incision in
 ‘ the

So also Brunus, having described the method by ligature, goes on to that by incision.

“ Operatio autem secundi modi est, ut non strin-
 “ gatur spacus [the ligature] sicut narratum est ad
 “ incidendas carnes, sed ligentur tantum ipsius ex-
 “ tremitates simul, et ut sit iste spacus fortior et gros-
 “ sior illo qui carnes incidit : deinde extende spacum
 “ cum unâ manuum tuarum versus exteriora, et cum
 “ alterâ manu tuâ incide illas carnes quæ sunt inter
 “ illas duas extremitates spaci, cum instrumento
 “ curvæ extremitatis.”

This is exactly, what is now by some called, Cutting upon the Wire ; and I have seen, in the hands of a very ingenious gentleman, a single instrument, very capable of executing all this purpose ; that is, of cutting out ten times as much as ever can be necessary.

The same account is to be found in Lanfranc, Rogerius, and most of the old writers ; who, in this, as in most other instances, have done little more than merely copy each other.

‘ the lower part, as may best serve the
 ‘ purpose of a free discharge of matter.

THIS method, as far as regards the mere operation, is, certainly, preferable to that with the forceps and scissars; but it produces the same destruction of the parts, and the same future inconveniences; like that, it is built upon a supposition, that such a removal of parts is necessary toward a cure; and, therefore, like that, stands upon a supposition which is not true.

THE same gentleman, in another paragraph, admits, that this method of operating is not proper in certain circumstances: (which circumstances cannot possibly render the disease easier of cure); and in such case, advises the mere longitudinal section of the gut.---“ Neanmoins, le
 “ canal fistuleux pourroit être si profond,
 “ ou le trou extérieur de la fistule dans un
 “ lieu de la fesse si éloigné du fondement,
 “ qu’ en faisant l’opération de la manière
 “ qu’ on vient de décrire, on emporteroit
 “ une trop grande portion de la substance.

“ En

“ En ce cas on ouvre sur une fonde canelée
 “ la fistule dans sa longueur,” &c. Never-
 ‘ theless, the fistulous hollow may be so
 ‘ deep, or the external orifice in the but-
 ‘ tock at such distance from the anus, that,
 ‘ if the operation be performed in the
 ‘ manner just described, it would occasion
 ‘ too large a loss of substance. In this
 ‘ case, the sinus must be opened length-
 ‘ ways, by means of a grooved director.’
 Mr. De la Faye does not, indeed, say, in
 express terms, that this longitudinal divi-
 sion will be sufficient for a cure; but I
 will venture to say for him, that I know,
 from repeated experience, that it will.
 The observation, therefore, which this
 gentleman has made, concerning the loss
 of substance, is not only just, and true in
 itself; but it is also an observation, which,
 if properly attended to, will lead to a
 truth, which he does not seem to have
 been sufficiently apprized of; which is,
 that every operation of this sort, (that is,
 every extirpation of parts,) is unnecessary,
 and therefore wrong. Large hollows, in
 which considerable quantities of matter
 have been formed; whose extent, with
 regard to the intestine, is deep; and whose
 orifice

orifice is in the buttock, at a distance from the anus, have always more induration about them, and discharge a larger quantity of gleet, than those which are smaller, more shallow, and thinner ; and whose matter has burst its way out, by an opening near to the fundament. If the former then are curable, by a mere longitudinal division of the intestine, without excision, which Mr. De la Faye, by his prescription, in some measure allows ; (and which is a truth beyond contradiction or contest) surely extirpation must be unnecessary in the latter. It can hardly be supposed, that nature will be able to do more in cases attended with increased difficulties, and impediments, than in those where every circumstance is more favourable, every hindrance less. And yet, whoever cuts away a portion of the intestine in the latter ; and omitting, or not performing, such operation in the former, finds, that they will do well without it, must reason in that manner, and shut his eyes against conviction.

MR.

MR. De la Faye is, indeed, sensible of the ill consequences, which such treatment produces, and has endeavoured to guard against them as well as he can ; but whoever has been so unfortunate, as to have been so treated, knows, that all these precautions are, in general, ineffectual : his words are,----“ Lorsqu'on a coupé
 “ dans l'operation une portion confide-
 “ rable du bord de l'anús, & que les chairs
 “ commencent a remplir le vuide, il faut
 “ mettre dans l'ouverture de cette partie
 “ une tente, un peu courte, qui en empe-
 “ chant le retrecissement lui conserve son
 “ diametre.”--- ‘ When a considerable
 ‘ portion of the verge of the anus has
 ‘ been cut away in the operation, and new
 ‘ flesh begins to fill up the void space, a
 ‘ short tent should be introduced into the
 ‘ part, in order to hinder the fundáment
 ‘ from contracting in its diameter ;’---but
 which it will often do, in spite of all the
 tents in the world.

Mr. Le Dran, a writer and practitioner of considerable figure in Paris, and whose works have been translated into English

by Mr. Gataker, is very particular with regard to this disease, and the method of treating it; and is also an advocate for this excising scheme, even more than Mr. De la Faye.

THIS gentleman uses the term fistula, without any regard to the date of the disease, or any attending circumstances, except the common and almost necessary appearances, when an abscess of this kind has been suffered to burst, *viz.* a small orifice, some degree of induration, and a discharge of fæcal matter: all which are circumstances, that necessarily accompany every abscess formed in the neighbourhood of, and piercing, the rectum: and this, at the very first hour, full as much as at any time after. So that, according to this manner of using the term, an abscess so circumstanced, and a fistula, are synonymous: which, I apprehend, cannot be, without confounding together two things materially and essentially different from each other. He says,----“ Je vois un petit trou a coté de
 “ l’anus, je sens des callosités autour, et je
 “ vois sortir par ce trou une assez grande
 “ quantité de pus; je conclus que c’est une
 “ fistule

“ fistule qui peut-etre interesse l’intestin
 “ rectum. Je vois sortir par ce trou un
 “ peu de matiere stercorale delayée ; ou
 “ bien le malade me dit, qu’il en sorte
 “ quelquefois ; je ne doute plus que le
 “ boyau ne soit percé ; et je dis que c’est
 “ un fistule complete.”---‘ When I see a
 ‘ small orifice by the side of the anus, and
 ‘ perceive a hardness round about it, and
 ‘ find that it discharges a large quantity of
 ‘ matter, I conclude, that it is a fistula,
 ‘ which, most probably, affects the rectum.
 ‘ When I find something like fæces dis-
 ‘ charged from this orifice, or mixed with
 ‘ what is discharged from it ; or the pa-
 ‘ tient informs me, that such kind of dis-
 ‘ charge is made ; I call the disease a com-
 ‘ plete fistula.’---This is, undoubtedly, the
 general custom ; notwithstanding which,
 the disease, in the state Mr. Le Dran has
 described it, may have no one true charac-
 teristic of a fistula ; nor require any of that
 treatment, which is said to be necessary
 and proper in such case. A matter of great
 consequence to the patient.

In the operative part of the treatment of
 the disease, Mr. Le Dran warmly espouses

the free removal, or extirpation of parts.--
 “ S’ il ne l’est que d’une coté, il faut em-
 “ porter ce qui est denué ; certain que si
 “ l’ on le laisse, la playe restera fistuleuse ;
 “ et qui si l’on se contente de le fendre,
 “ les deux lambeaux flottans dans la playe
 “ rendront les pansemens tres difficiles, et
 “ meme la playe fistuleuse.”--‘ If the dis-
 ‘ ease be on one side only, all that part of
 ‘ the intestine, which is laid bare by the
 ‘ matter, ought to be cut away ; because,
 ‘ it is certain, that if such part be left in
 ‘ the wound, it will become fistulous ; and
 ‘ that, if we only make a simple division,
 ‘ the divided lips will hang loose and float-
 ‘ ing in the wound ; will render the appli-
 ‘ cation of dressings difficult, and make
 ‘ the sore fistulous.’

THESE are Mr. Le Dran’s words and sentiments : and this the method of practice, which is taught, and followed by the majority.

THAT some small part of this process may be necessary in the true, old, callous, fistulous sore, I do not deny ; (though not even then, in any degree equal to the above direction)

direction) but that the whole of it is absolutely unnecessary in the recent abscess, I can, from repeated experience, venture to affirm. That mere division of the naked intestine (if such division be dressed properly) will not render a sinus fistulous, which was not so before, is a truth as clear as any in Euclid ; and, indeed, it is to me matter of wonder, how such opinion could ever be embraced. The division of the intestine, by laying the cavity of the sinus open, destroys or removes the principal circumstance which can make such a case resemble a fistula ; by converting a hollow sinous ulcer into an open one : and with regard to the other characteristic, induration, certain it is, that if the knife does not find the parts hard, it cannot possibly make them so ; on the contrary, it puts them under a necessity of undergoing such a degree of suppuration, as, if properly managed, will prove the cure of that very induration.

MR. Le Dran says, “ That the lips of
 “ the wound will hang floating ; will ren-
 “ der the dressings difficult, and the fore
 “ fistulous.” I think, I understand what
 Mr. Le Dran means : the tumid lips of the

recently-made incision, will, certainly, be a hindrance to the cramming in a quantity of dressings; and such attempts will, as certainly, increase the tumefaction and hardness; and, if persisted in, with the help of a little escharotic, may bid fair for producing a callous sore: but all this lies at the door of the surgeon, and not of the case: all this is unnecessary, improper, and pernicious. I cannot, under such treatment as I would call good surgery, conceive the tumefaction, and inflamed state of the lips of the divided gut to remain more than a few days; during which time, it must be the business of art to appease, relax, and produce suppuration; which, if properly executed, will infallibly prevent all tendency towards a fistulous sore, instead of producing one.

THAT the lips of the wound in the rectum will not separate from each other, in such manner as to admit a large quantity of lint; and that the membranous structure of the part will render such lips large, and subject to inflammation, until some degree of suppuration comes on, is beyond all doubt; but neither of these are reasons for
extirpation:

extirpation : for the inflammation will be full as high where a piece is cut out, as where the part is merely divided, and all the symptoms of pain and uneasiness full as great, if not greater : and with regard to the impracticability of putting in a quantity of dressing, I repeat, that it is not at all necessary ; but that, on the contrary, it is wrong, and tends only to mischief. A doffel or two of fine lint should, immediately after the incision is made, be placed between the divided lips, by passing them from the cavity of the rectum, laterally into the cavity of what before such division was the sinus : these should not be removed, until either the beginning suppuration, or the necessary action of the gut in going to stool, throws them out ; when their place should be supplied with others of equal size, imbued with an easy soft digestive.

If the patient be in health, the lips of this wound, like those in all other membranous parts, after they have been crude, tumid, and inflamed, and have, for a few days, discharged a thin, discoloured kind of gleet, will begin to suppurate : if such suppuration be by proper, that is, by soft,

gentle treatment, encouraged, not only the tumefaction and inflammatory hardness brought on by the incision, will soon subside and disappear ; but also all the induration, which attended the sinus before it was laid open.

ON the other hand, if the patient's habit be bad, and no such inflammatory tumefaction succeed to the incision ; but instead of it, the lips of the wound are soft, flabby, and inclining to be livid, the case has, undoubtedly, an unpromising appearance : but the remedy is not surgical ; removal of parts will not remove, or amend this state of the fore, or at all lessen the hazard arising from it : it may, indeed, render the introduction of dressings somewhat more easy ; but it neither will, nor can, make such dressings at all more effectual, or more conducive to the one end which ought to be pursued.

IN such case, the remedy must be an internal one ; and whoever depends upon externals, will give his patient much unnecessary trouble, and only waste his time.

THE truth is, this doctrine of the necessity of cutting out a portion of the intestine, (though it is as old, or, perhaps, older than Celsus *) is almost a necessary consequence of the manner, in which these fores, (upon a supposition of their being fistulous) almost always have been, and do still continue to be, generally treated.---I mean, the custom of cramming them full of lint; and of charging that lint with medicines, which, though used under more gentle appellations, are really escharotics. Upon this plan, I am willing to allow, that the lips of the divided intestine will be in the way; and prove a considerable impediment in the introduction of such dressings; and I will also allow, that by means of such medicines, the whole wound will be irritated, inflamed, and hardened; and so far wear the appearance of being fistulous, as nei-

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ther

* ‘ In hæc genera demisso specillo, duabus lineis
 ‘ incidenda cutis est, ut media inter eas habenula
 ‘ tenuis admodum injiciatur, ne protinus ora coeant,
 ‘ sitque locus aliquis linimentis, quæ quam paucissima
 ‘ superinjicienda sunt, omniaque eodem modo facien-
 ‘ da, quæ in abscessibus posita sunt.”

CELSUS.

ther to yield good matter, nor be disposed to heal ; at least, not till nature has got the better of the surgeon.

WHAT Mr. Le Dran says, in another paragraph of the same tract, may serve to strengthen what I have asserted.---“ S’il
 “ est denué des deux cotés, il faut pour
 “ le conserver, faire à l’ autre fesse une
 “ contre-ouverture, pres de là, & la faire
 “ assez longue pour pouvoir panfer com-
 “ modement ; puis ecouter ce que la na-
 “ ture fera pour lui.”---‘ If the gut be
 ‘ denuded on both sides, a counter-open-
 ‘ ing should be made on the other side,
 ‘ long enough to permit, conveniently,
 ‘ the application of dressings ; and then
 ‘ we should wait, and see what nature
 ‘ will do toward assisting the patient.’

A VERY important piece of advice this ; worth all the directions for the extirpation of parts ; and which, if timely and duly attended to, will, generally, render all such directions quite unnecessary.

IT is, indeed, somewhat remarkable, that the same gentleman should give the
 above

above very excellent advice ; and, almost in the same breath, add, what follows.---

“ S’ il est denué exactement dans toute sa
 “ circonference, & que son depouillement
 “ ne s’etend pas plus haut que les releveurs
 “ de l’anus, il faut emporter tout ce qui
 “ est denué.”---‘ If the intestine be bared
 ‘ by the matter all round, and this denu-
 ‘ dation does not extend above the levato-
 ‘ res ani, all that part which is so bared,
 ‘ should be extirpated.’ That is, the whole
 verge of the anus : all that part which is so
 formed by nature, as, by its relaxation, to
 permit the largest, and most solid, stool, to
 pass out ; and, by its constriction, to de-
 tain and keep in, for a while, the most
 fluid, sharp, and stimulating one : all that
 part, which, when destroyed or removed,
 not only never can be renewed, but never
 can have its place supplied, nor its office
 properly executed by what must succeed to
 it : surely it may, with great justice, be
 said, that the last state of a man in these
 circumstances is worse than the first ; and
 that his remedy proves a most afflicting
 disease.*

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* In the Memoirs of the French Academy, is a case of this kind, related by Mr. Faget. The patient had
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PREJUDICE often prevents us from seeing truth, though it stands before us : for Mr. Le Dran, though he so strongly re-

an abscess on each side of the rectum ; which, before Mr. Faget saw it, had been opened without meddling with the gut.

The two abscesses communicated by a hollow or sinus under the os coccygis ; the depth in all the upper part is described to be about two inches, but in the perineum the skin only was separated ; that is, the hollow was quite superficial. After five months attendance, during which time the rectum was never divided, the patient was brought to Paris ; where, in a consultation between the Messieurs Faget and Boudon, it was agreed, that the only method of obtaining a cure, must be by extirpating, or cutting away the whole extremity of the intestine, as deep as it was laid bare ; which operation is thus described.—

“ Je perçai d’abord le rectum de droit à gauche,
 “ avec un gros stile ; avec lequel je fis l’anse. Je
 “ commençai à couper le lambeau de peau qui tenoit
 “ au coccyx, & je continuai tout le long d’attache
 “ des muscles releveurs jusqu’ à la partie moyenne du
 “ perinée, ou il y avoit beaucoup de dureté, & de
 “ callositez, que j’emportai ; je pansai la playe avec
 “ un gros bourdonnet, & des lambeaux de linge trem-
 “ pés dans l’eau alumineuse, le tout soutenu par plu-
 “ sieurs compresses & un bandage convenable, &c.”

Mr. Faget says, that the patient was six months longer in getting well. To which, I must take the liberty of adding, that he was much more fortunate, than
 some

recommends the extirpation of a portion of the intestine, yet has made the same observation on those fistulæ which run too high for extirpation, as Mr. De la Faye : he has very justly remarked, that they will do well without such operation : and has given so good, and so true an account of the matter, that it is amazing he should not see, that the same method, both of reasoning and of acting, was equally applicable to both cases ; that is, to those fistulæ which do not extend so high, as well as to those

some whom I have seen under the same treatment. The relator, in the rest of the memoir, endeavours to explain the method by which the new anus became capable of executing the office of the old one ; and very justly seems to wonder, why the surgeon, who first had the care of the patient, and who first opened the abscesses, did not divide the rectum in each of them. Mr. Faget's surprize, and his censure on the operator, are certainly well founded : but I must own that it seems to me to be full as extraordinary, that he, who saw the propriety of its having been done before, should not, at least, try what it would do afterward. If this experiment had been made, and the case properly conducted, I make little doubt that the patient might have been cured without the loss of his fundament. A loss, which, though possibly in youth and health he might not be so sensible of as to alarm him ; yet in age, or a state of debility, must prove a very grievous one.

those which do : he says,---“ On trouve
 “ souvent des sinus qui montent fort haut
 “ le long du rectum ; & même vers la vef-
 “ sie, dans la tissu cellulaire qui entoure
 “ ces parties : sinus qui semblent devoir
 “ rendre ces maladies incurables, parce-
 “ qu’ils vont plus haut que le doigt ne
 “ peut aller. Mais l’experience m’a appris
 “ que ces sinus se remplissent presque
 “ toujours dans les six premiers jours---ou
 “ pour parler plus justement, que les
 “ chairs se rapprocherent, n’ayant été qu’
 “ écartés par le pus, & non fondues.”---
 ‘ Sometimes we meet with sinusses, which
 ‘ run so high in the tela cellulosa, along the
 ‘ rectum, and up toward the bladder, that
 ‘ one would be inclined to believe them to
 ‘ be incurable, from their being beyond
 ‘ the reach of the finger ;* but I have
 ‘ learned

* It is hardly decent for a surgeon to say it ; but I am much inclined to believe, that this circumstance of the sinus being out of the reach of the finger, is the very individual one, on which the expedition of the cure (that is, the shortness of the time, in which Mr. Le Dran says, that he finds these cavities filled up) depends. For if they were within the reach of the finger of an operator, who thinks as this gentleman writes, he would immediately go to work with his instruments ; and if he did nothing worse, must necessarily

‘ learned from experience, that these
 ‘ sinuses fill up within the first six days.
 ‘ ---Or, to speak more properly, that the
 ‘ membranes,

necessarily prolong.—It has always been a very generally received opinion, that if the hollow of the sinus be higher than a finger in ano can reach, all chirurgic operation is fruitless. There is hardly an author ancient or modern, who has not inculcated this doctrine, though daily experience might have convinced them of its falshood.

Among the rest, Heister has given us his opinion on this subject, in the most positive manner:—“ Et
 “ sane nisi digitus, in anum depressus, fistulæ os at-
 “ tingere valet, verum illud adhuc profundius latet,
 “ sine vitæ periculo, ob metum lædendarum vena-
 “ rum majorum, sectio institui nequit; adeoque
 “ tunc parum plerumque, imo vero nihil omnino
 “ chirurgi artificia proficiunt, &c.”

This, which, as I have observed before, is the doctrine of all our writers, has always stood upon the same principle, *viz.* the fear of hæmorrhage; and all the propagators of it have always supposed, that nothing but a division of the whole sinus could possibly produce a cure; which supposition is, by no means, true.

When the case is an abscess formed in the cellular membrane, the length of the sinus must be proportioned to the distance of the seat of such abscess from its external orifice: this is sometimes considerable, quite out of the reach of the finger in ano; but it does, by no means, follow, that either this sinus must be divided through its whole length; or that the disease cannot be cured; and, therefore, that it is bet-
 ter

‘ membranes, which have been only separated, and not dissolved, by the matter, again approach each other.’---

CAN

ter not to meddle with it at all. Frequent experience proves the contrary. If all that part of it, which is within the reach of the finger in ano, (that is, all that part of it which is principally affected by the action of the muscles of the anus and rectum) be fairly divided; if the wound, so made, be dressed in such manner, as to produce no inflammatory irritation; if it be not frequently poked into, and examined; and the patient’s habit be properly taken care of, the length of the sinus will add very little to the difficulty attending the cure; all that is out of reach will collapse and heal; and the case will very soon be exactly the same, as if the whole hollow was within the finger’s length.

The probability of an hæmorrhage from the large vessels about the upper part of the rectum, is a thing which ought, by all means, to be avoided, as it might give a great deal of trouble, and create some hazard; but the operation, which would induce such apprehension, being quite unnecessary, this risque is out of the question.

The last-mentioned author (Heister) although in general a very exact and careful writer, seems, in his observations on this complaint, rather to have copied what our predecessors have written on it, than to have given us what his own experience might have furnished him with: the latter would have convinced him, that all his preparation by bleeding, purging, &c. before the operation, is quite unnecessary; that
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CAN any man give a more rational, or more true account of this matter ; or produce a stronger argument against cutting out a part of the intestine ? The operator's finger cannot reach the upper part of the sinus, and, therefore, he cannot extirpate : but sinuses, which, by being out of reach, cannot be extirpated, do well without it, merely by the help of nature ; who, when the matter is discharged, and such an opening made, as prevents any future lodgment, brings the sides of the cavity together, and endeavours thereby to obliterate it. It is true, that she can, but seldom, accomplish this end entirely ; I mean, throughout the whole length of the sinus ; the lower part generally remaining open, tho' contracted to narrow compass : this it is, most frequently, absolutely necessary to divide, in order to obtain a cure ; but that part of the said sinus, (if there be any) which is out of
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the blind fistulæ are very little, if at all, more difficult of cure than the open ones ; and that the disease, in question, admits of being treated, and cured in pregnant women, as perfectly and as easily as in those who are not so. The contrary doctrines are, certainly, no rules of good practice, however venerable they may be from their antiquity.

the reach of the instrument guided by the finger in ano, is not a matter of that consequence, which it is supposed to be. If the lower part, or what is fairly within reach, be divided, such division will, in most cases which are curable at all, be fully sufficient for a cure, as I have often and often experienced. I know that this is contrary to the generally-received doctrine; but I know it is true; and am much inclined to believe, that the supposition of the necessity of laying open the whole sinus, however deep it may run, has contributed greatly to the fatigue and hazard which many people have unnecessarily undergone in this disease: it has occasioned such poking with long probes, and such cramming in of tents and dressings, as have proved extremely pernicious, and brought on symptoms and trouble, which would not have attended the same cases under other management.

ONE word more, and I have done with this part of my subject. As I have given my opinion so freely, concerning the practice of excision, a representation of the inconveniences likely to arise from it, might, from me, be thought to be an exaggeration:

tion : I shall, therefore, take the liberty, once more, to quote Mr. Le Dran ; who, considered as a patron of the practice, cannot be supposed to overcharge it. He says,

---“ Cette grande playe fera dans les com-
 “ mencemens pancée comme les autres ;
 “ mais quand les chairs commencent a se
 “ rapprocher elle demande des attentions
 “ particulieres ; sans lesquelles, l’anus de-
 “ viendrait si étroit que les excréments ne
 “ pourroient y passer ; pour peu qu’ils ont
 “ de consistance. Il faut donc alors metre
 “ jusque dans le rectum une tente de linge,
 “ lisse, assez longue, & assez grosse, pour
 “ entretenir le passage. Il faut même sur le
 “ fin, supplier a cette tente, par une espece
 “ de suppositoire d’ivoire, percé en forme
 “ de cannule ; & avoir soin de la bien as-
 “ sujettir par la bandage, a fin qu’elle ne
 “ sorte pas. La cicatrice étant faite, il
 “ faudra que le malade porte cette suppo-
 “ sitoire encore pres d’un an ; sans quoi la
 “ cicatrice ferreroit l’anus de plus en plus.”

---“ This large wound should, at the first,
 ‘ be dressed like any other ; but when the
 ‘ sides begin to approach each other, it
 ‘ will then demand particular attention,
 ‘ lest the fundament should become so

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‘ contracted,

‘ contracted, that the fæces, if they be at
 ‘ all hard, cannot be expelled. Therefore, in
 ‘ order to keep the passage of a proper size,
 ‘ a smooth tent made of linen should be
 ‘ introduced ; which tent should be of such
 ‘ a size and length, as to serve the purpose
 ‘ for which it is intended. Toward the close
 ‘ of the cure, in the place of this, an ivory
 ‘ suppository, made in the form of a can-
 ‘ nula, must be substituted, and kept con-
 ‘ stantly in, by means of a proper bandage.
 ‘ Which suppository must be worn for near
 ‘ a year after the sore is perfectly healed ;
 ‘ otherwise the cicatrix will contract the
 ‘ anus still more and more every day.”*

THIS is what is called cutting for a fis-
 tula : this is the operation, which they,
 who have undergone it, do so pathetically
 describe and lament ; and what they, who
 have the misfortune to be afflicted with the
 disease, do (from the account of others) so
 fearfully dread. It is true, that it has the
 sanction

* To which he might have added, that when all
 this is done, and every precaution of this kind used,
 the patient will always find it difficult and painful,
 and sometimes absolutely impossible to retain a loose
 stool.---An evil still greater than the trouble of ex-
 pelling a hard one.

sanction of several eminent writers ; that it is practised by many surgeons ; and that it is recommended and exhibited by anatomico-chirurgical teachers ; but notwithstanding these authorities, I shall not scruple to say, that it is cruel, unnecessary and wrong.

THAT, by these means, abscesses juxta anum, and fistulæ in ano, (as they are called) are cured, I make no doubt ; nay, I know that they are : but I also know from repeated experience, that they are curable by means, which are more expeditious, more easy, and neither hazardous in the use, nor productive of evil in the event. I mean, by mere simple division of all that part of the sinus which is within reach ; by soft, gentle treatment of the sore after such operation ; and by proper care of the habit.*

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* When the habit is out of order, as it most frequently is in persons afflicted with this disorder, if recourse be not had to internals, the surgeon will gain little ground. This is a circumstance which ought always to be attended to ; and it is, in some measure, owing to a want of due regard to it, that we find
such

THE hæmorrhage, (to say nothing of the pain) which now and then attends the extirpation of a large piece of the intestine and fundament, is alarming, both to weak minds, and to weak bodies; and the inconveniences

such a farrago of different dressings; such remedies for fungous, for foul, for callous sores, &c. These diseased appearances and circumstances most frequently proceed from disorders in the habit; and if that be not corrected, the same appearances will continue, notwithstanding all our escharotics, detergents, digestives, incarnatives, &c. &c. &c.

In cold, debauched, lax, or sluggish habits, if the patient be not warmed by aromatics, and braced by the bark, these cases will often prove tedious and troublesome.

From the induration of the parts about: from the face and color of the sore; and from the discoloured gleety discharge, callosity, latent mischief, and undiscovered sinuses will be suspected; whereas, in truth, neither one nor the other are the cause of such diseased appearances. The administration of proper remedies will, most commonly, in a few days, produce such an alteration, as the whole art of surgery could not (by mere externals) bring about in as many weeks, if at all. Many and many a sore of this kind have I seen brought into the hospital, which has had all these disagreeable appearances, which has long, and fruitlessly, been treated with all the variety of externals; and which a decoction of the bark and rad. serpentariæ has, in a very short time, put into such a condition, as not to want any thing but dry lint.

conveniences arising from loss of substance about the verge of the anus, either in strong exercise, in the retention of loose stools, or the expulsion of hard ones, are so great, that I have known several people, who have daily, and sincerely wished for their uncut fistulæ again : and who, either from pain, or uncleanness, or both, have been rendered truly unhappy.

IN short, I can venture to assert, from many years experience, on a great variety of subjects, that when the disease is curable by chirurgic art, the method which I have proposed, will, with more ease, expedition, and certainty, attain that end, than the method by extirpation ; and that, without producing any of those very disagreeable circumstances, which Mr. le Dran has so justly described.

AND for the truth of this assertion, I appeal to all those (many in number) who have for these ten or twelve years past, attended St. Bartholomew's-Hospital.

S E C T. VI.

HITHERTO I have considered the disease either as an abscess, from which the matter has been let out by an incision, made by a surgeon; or from which the contents have been discharged by one single orifice, formed by the bursting of the skin, somewhere about the fundament.----I am now to take notice of it, when, instead of one such opening, there are several.

THIS state of the case generally happens, when the quantity of matter collected has been large, the inflammation of considerable extent, the adipose membrane very floughy, and the skin worn very thin before it burst.---It is, indeed, a circumstance of no real consequence at all; but, from being misunderstood, or not properly attended to, is made one of additional terror to the patient, and additional alarm to the inexperienced practitioner: for it is taught, and frequently believed, that each of these orifices is an outlet from, or leads to, a distinct sinus, or hollow; whereas, in truth, the case is, most commonly, quite otherwise; all these openings are only so many

many distinct burstings of the skin covering the matter ; and do all, be they few, or many, lead, and open immediately into, the one single cavity of the abscess : they neither indicate, nor lead to, nor are caused by distinct sinuses ; nor would the appearance of twenty of them (if possible) necessarily imply more than one general hollow.

IF this account be a true one, it will follow, that the chirurgic treatment of this kind of case ought to be very little, if at all, different from that of the preceding ; and that all that can be necessary to be done, must be, to divide each of these orifices, in such manner, as to make one cavity of the whole. This the probe knife will easily and expeditiously do ; and, when that is done, if the fore, or, more properly, its edges, should make a very ragged, uneven appearance, the removal of a small portion of such irregular angular parts, will answer all the purposes of making room for the application of dressings, and for producing a smooth, even cicatrix, after the fore shall be healed.

WHEN a considerable quantity of matter has been recently let out, and the internal parts are not only in a crude, undigested state: but have not yet had time to collapse, and approach each other; the inside of such cavity will appear large; and, if a probe be pushed with any degree of force, it will pass in more than one direction into the cellular membrane, by the side of the rectum. But let not the unexperienced practitioner be alarmed at this, and immediately fancy that there are so many distinct sinuses; neither let him, if he be of a more hardy disposition, go to work immediately with his director, knife, or scissars: let him enlarge the external wound, by making his incision freely; let him lay all the separate orifices open into that cavity; let him divide the intestine lengthwise by means of his finger in ano; let him dress lightly and easily; let him pay proper attention to the habit of the patient; and wait, and see what a few days, under such conduct, will produce. By this, he will frequently find, that the large cavity of the abscess will become small and clean; that the in-

duration

duration round about will gradually lessen ; that the probe will not pass in that manner into the cellular membrane ; and, consequently, that his fears of a multiplicity of sinuses were groundless. On the contrary, if the sore be crammed, or dressed with irritating, or escharotic medicines, all the appearances will be different : the hardness will increase ; the lips of the wound will be inverted ; the cavity of the sore will remain large, crude, and foul ; the discharge will be thin, gleety, and discoloured ; the patient will be uneasy and feverish : and, if no new cavities are formed by the irritation of parts, and confinement of matter ; yet the original one will have no opportunity of contracting itself ; and may, very possibly, become truly fistulous.

I WILL not say, that there never is more than one sinus, running along the side of the intestine (I mean, on the same side) ; but I will venture to assert, that, for one instance, in which the case is really so, forty are supposed, and talked of. Distinct and separate openings in the skin, from the same cavity, or sinus, are common, but perfectly

perfectly distinct sinuses, running along the intestine, on the same side, are very far from being so ; they are very uncommon.

I SHOULD be sorry, to have such a misconstruction put upon what I have said, as to have it supposed, that I made light of a disease, which, every body knows, is, sometimes, attended with very troublesome circumstances : or, that I make pretension to any particular secret method of treating it : or, that I think myself more capable of conducting it than the generality of practitioners : as none of these are true, I should be sorry, to have them imputed to me. I do allow, (what is, undoubtedly true) that this disease, in some constitutions, and under some circumstances, will engage the attention, and exercise the judgment of the best and most able practitioner ; but, on the other hand, I must repeat, that a great deal of the trouble, which it is sometimes attended with, does not arise from the disease itself, but from misconception, and improper treatment.

I HAVE

I HAVE freely, and without reserve, related that method of treatment, which I have found to be most successful ; nor do I know any applications, which are at all specific, or more proper for this kind of sore than for all others, in parts of the same structure : the most simple, and they which give the least pain, are the best : neither these, nor mere dry lint, should ever be introduced in larger quantity than can be admitted, and borne with ease ; that the sore may not be distended, but a fair opportunity given to nature to contract it gradually.

THIS every practitioner may be capable of executing, since it consists more in abstaining from doing mischief, than in doing any thing which may require particular judgment or dexterity. It is true, that the method which I have proposed, will considerably lessen the chirurgic apparatus of instruments and dressings ; but it will be attended with success, and produce that which every patient has a right to expect from his surgeon ;--a firm cure, in a short space of time, and with the least possible fatigue.

IT

It sometimes happens, that the matter of an abscess, formed juxta anum, instead of making its way out through the skin, externally near the verge of the anus, or in the buttock, pierces through the intestine only. This is what is called a blind internal fistula : *Fistule borgne interne*.

In this case, after the discharge has been made, the greater part of the tumefaction subsides, and the patient becomes easier. If this does not produce a cure, which sometimes, though very seldom, happens, some small degree of induration generally remains in the place, where the original tumor was ; upon pressure on this hardness, a small discharge of matter is frequently made per anum ; and sometimes the expulsion of air from the cavity of the abscess into that of the intestine, may very palpably be felt, and clearly heard ; the stools, particularly, if hard, and requiring force to be expelled, are sometimes smeared with matter ; and although the patient, by the bursting of the abscess,

abscess,

abscess, is relieved from the acute pain, which the collection occasioned ; yet, he is seldom perfectly free from a dull kind of uneasiness, especially if he sits for any considerable length of time in one posture. The real difference between this kind of case, and that in which there is an external opening (with regard to method of cure) is very immaterial ; for an external opening must be made, and then all difference ceases. In this, as in the former, no cure can reasonably be expected, until the cavity of the abscess, and that of the rectum, are made one ; and the only difference is, that in the one case we have an orifice at, or near, the verge of the anus, by which we are immediately enabled to perform that necessary operation ; in the other, we must make one.

SOME of the best of the modern writers have, I think, represented this state of the disease, in such manner, as to make it seem to labour under difficulties, which I cannot say, that I ever found it really did ; and have thereby thrown the appearance of obscurity and trouble, on what is generally clear, and easy.

IN Mr. De la Faye's very excellent notes on Dionis, is the following passage.

“ Lorsque les fistules n'ont pas d'ouver-
 “ ture externe, & que rien ne designe le
 “ lieu où il faut faire l'operation, il y a
 “ deux moyens de le decouvrir. Le pre-
 “ mier est de l' invention de feu Mr. Thi-
 “ baut, qui portoit le doigt index dans
 “ l'anús, & le recourboit ; ensuite en le
 “ tirant un peu a lui, pour ramener a
 “ l'exterieur, le foyer de la matiere ; tan-
 “ dis qu' il pressoit avec un autre doigt
 “ les environs du fondement : la douleur
 “ qu' il causoit au malade marquoit le
 “ lieu ou il falloit faire l' incision pour
 “ rendre la fistule complete. Le second
 “ est de Mr. Petit, qui met dans l' anus
 “ pendant vingt-quatre heures une tente
 “ qui touchant l' ouverture de la fistule,
 “ empeche le pus de s' ecouler, & le ra-
 “ masse en assez grande quantité pour faire
 “ a l' exterieur une tumeur, qu' indique le
 “ lieu ou il faut faire l' operation.” ----

‘ When fistulæ have no external opening,
 ‘ and there is no mark, whereby to distin-
 ‘ guish the place where the operation
 ‘ ought to be performed, there are two
 ‘ methods

‘ methods of discovering it, the first is,
 ‘ that of the late Mr. Thibaut, who put
 ‘ his fore finger into the rectum, and
 ‘ curving it, endeavoured to bring the
 ‘ foyer, (that is, the hollow, which fur-
 ‘ nishes the matter,) nearer to the external
 ‘ part of the fundament; while, with his
 ‘ other finger, he pressed all the parts
 ‘ round about: the pain which he, by
 ‘ these means, gave to the patient, marked
 ‘ out the place where the incision ought
 ‘ to be made, in order to render the fi-
 ‘ stula complete. The second method is,
 ‘ that of Mr. Petit. He put into the
 ‘ anus, for the space of twenty-four hours,
 ‘ a tent; which, by stopping up the ori-
 ‘ fice of the fistula, hindered the matter
 ‘ from running out into the cavity of the
 ‘ gut, and forced it to be collected in
 ‘ such quantity as to form an external tu-
 ‘ mefaction, sufficient to indicate the place
 ‘ where the operation ought to be per-
 ‘ formed.’

THE former of these, as far as it de-
 pends on that single circumstance, that the
 point where the pain is felt is the exact
 place where the opening ought to be
 made,

made, is, by no means, to be depended upon : the latter method is operose, troublesome, and, in general, very insufficient for the purpose. If the orifice, through which the matter has made its way, lies high in the intestine, a tent cannot be introduced so as to press against it sufficiently, unless it be so long, and so large, as to occupy the whole cavity of the gut. How fatiguing, and how difficult, the retention of this, for twenty-four hours, must be to many people, is easy to imagine : if the orifice be near to the fundament, in the lower part of the intestine, the possibility of closing it may be somewhat greater ; but the inconvenience must be nearly the same, as well as the uncertainty.

IN short, not to enter farther into this totally unnecessary kind of practice, I would advise the man, who thinks to try it, to consider the stricture made by the contraction of the verge of the anus ; the expansion of the cavity of the gut, immediately above that stricture ; the great dilatibility of the membranes of the intestine, and the uneven, wrinkled state in which it

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must necessarily be ; and then to reflect, how very unlikely it is, that he should, without filling the whole cavity, stop, or block up a small breach, whose exact situation he cannot know, or learn.

IT is true that by discharge of the matter into the cavity of the intestine, the fluctuation of it within the abscess is no more to be felt ; the tension ceases ; the tumor, in great measure, subsides ; and, consequently, all these indications of its situation disappear ; but I do not remember, ever to have seen a single case of this kind, in which there was not in the buttock, or near to the verge of the anus, either a remaining discoloration of the skin ; or a hardness, or something by which the finger of a careful, judicious examiner could clearly and certainly find where the disease was. Each of the circumstances just mentioned do, as certainly, point out where the hollow, leading to the sinus is, as the fluctuation of the matter did, before the cavity burst ; and a knife, or lancet, plunged into this (provided it be pushed deep enough) will never fail to enter the said hollow. When this is done,

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the case becomes, what is commonly called complete, and must be treated accordingly.

S E C T. VII.

I C O M E now to that state of the disease, which may, truly and properly, be called fistulous. This is generally defined, sinus angustus, callosus, profundus; acri sanie diffluens: or, as Dionis translates it, “ Un ulcere profond, & caver-
 “ neux, dont l’ entrée est étroite, & le
 “ fond plus large; avec issue d’ un pus
 “ acre & virulent; & accompagné de cal-
 “ losités.”

VARIOUS causes may produce, or concur in producing, such a state of the parts concerned, as will constitute a fistula, in the proper sense of the word; that is, a deep, hollow sore, or sinus, all parts of which are so hardened, or so diseased, as to be absolutely incapable of being healed, while in that state; and from which a frequent, or daily, discharge is made, of a thin, discolored sanies, or fluid.

THESE

THESE I shall take the liberty of dividing into two classes, *viz.* those which are the effect of neglect, distempered habit, or of bad management; and which may be called, without any great impropriety, local diseases: and those which are the consequence of disorders, whose origin and seat is not in the immediate sinus or fistula, but in parts more or less distant; and which, therefore, are not local complaints.

THE natures and characters of these are obviously different by description; but they are still more so in their most frequent event: the former being generally curable by proper treatment; the latter frequently not so, by any means whatever.

UNDER the former, I reckon all such cases, as were originally mere collections of matter within the coats of the intestine rectum, or in the cellular membrane surrounding the said gut: but which, by being long neglected, grossly mismanaged; or, by happening in habits which

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were

were disordered, and for which disorders no proper remedies were administered, suffer such alteration, and get into such state, as to deserve the appellation of fistulæ.

UNDER the latter, are comprized all those cases, in which the disease has its origin and first seat in the higher and more distant parts of the pelvis; about the os sacrum, lower vertebræ of the loins, and parts adjacent thereto; and are, either strumous, or the consequence of long and much distempered habits: or the effect of, or combined with, other distempers, local, or general; such as a diseased neck of the bladder, or prostate gland, or urethra; the lues venerea, cancers, &c. &c. &c.

AMONG the very low people, who are brought into hospitals, we frequently meet with cases of the former kind: cases, which, at first, were mere simple abscesses; but which from uncleanness, from intemperance, negligence, and distempered constitutions, become such kind of sores, as may be called fistulous.

IN these the art of surgery is, undoubtedly, in some measure, and at some time, necessary; but it very seldom is the first or principal fountain, from whence relief is to be sought: the general effects of intemperance, debauchery, and diseases of the habit, are first to be corrected and removed, before surgery can, with propriety, or with reasonable prospect of advantage, be made use of. If the patient be infected with the lues venerea, that must first be cured; if he be anasarcaous, or leucophlegmatic, that indisposition must be corrected; if he be feverish, that heat must be calmed; and if he labour under any of the general ill effects arising from foul skin, dirty clothing, unclean, and unwholesome lodging, &c. producing pallid countenance, undue secretions, loss of appetite, œdematous legs, intermittent fevers, &c. the state of blood, which always accompanies such complaints, must be amended, before surgery can be administered to any good purpose. If knife, caustic, or whatever other external means are thought proper to be used, be applied before such general evils have been corrected, they

will do little or no good ; and may do much mischief. On the contrary, when the lues is corrected ; when the patient is cool, and gets good sleep ; when the secretion of urine is so re-established, the general absorbent faculty so restored, and the solids so braced, that the legs cease to swell, and the patient recovers his natural appetite and complexion, we find the local disease, instead of standing still, has almost always made great advances towards being cured, by being altered in all the principal circumstances of induration, crudity, gleet, &c. Whatever chirurgic operation or treatment may now be necessary, will, in all probability, succeed immediately ; whereas, all our attempts before such care, do, and must prove fruitless.

THE surgery required in these cases consists in laying open, and dividing the sinus, or sinuses, in such manner that there may be no possible lodgment for matter, and that such cavities may be fairly opened lengthways into that of the intestine rectum : if the internal parts of these hollows are hard, and do not yield good matter, which is sometimes the case, more especially

ally where attempts have been made to cure by injecting astringent liquors, such parts should be lightly scratched, or scarified, with the point of a knife or lancet, but not dressed with escharotics ; and if, either from the multiplicity of external orifices, or from the loose, flabby, hardened, or inverted state of the lips and edges of the wound near to the fundament, it seems very improbable, that they can be got into such a state, as to heal smooth and even, such portion of them should be cut off, as may just serve that purpose. The dressings should be soft, easy, and light ; and the whole intent of them to produce such supuration as may soften the parts, and may bring them into a state fit for healing.

IF a loose, fungous kind of flesh has taken possession of the inside of the sinus, (a thing much talked of, and very seldom met with) a slight touch of the lunar caustic will reduce it sooner, and with better effect on the sore, than any other escharotic whatever.

THE method and medicines, by which the habit of the patient was corrected,

must be continued, (at least, in some degree) through the whole cure; and all those excesses and irregularities, which may have contributed to injure it, must be avoided.

By these means, cases, which, at first, have a most disagreeable and formidable aspect, are frequently brought into such state, as to give very little trouble in the healing.

MORE trouble must be supposed to attend this kind of case, than does a mere simple, recent abscess; and more time will necessarily be required to bring the parts into a kindly state; but, under proper conduct, they will, in general, be found to do well, without any of those operations which mankind have such dread of, and which are, in general, taught and practised.

IF the bad state of the sore arises merely from the improper manner, in which it may have been treated; I mean, from its having been crammed, irritated, and eroded; the method of obtaining relief is so obvious, as hardly to need recital.

A PATIENT, who has been so treated, has, generally, some degree of fever; has a pulse, which is too hard, and too quick; is thirsty, and does not get his due quantity of natural rest. A sore, which has been so dressed, has, generally, a considerable degree of inflammatory hardness round about; the lips and edges of it are tumid, full, inflamed, and, sometimes, inverted; the whole verge of the anus is swollen; the hæmorrhoidal vessels are loaded; the discharge from the sore is large, thin, and discoloured; and all the lower part of the rectum participates of the inflammatory irritation, producing pain, bearing down, tenesmus, &c. *Contraria contrariis* is never more true than in this instance: the painful, uneasy state of the sore, and of the rectum, is the great cause of all the mischief, both general and particular; and the first intention must be to alter that. All escharotics must be thrown out, and disused; and in lieu of them, a soft digestive should be substituted, in such manner, as not to cause any distention, or to give any uneasiness from quantity; over which, a pultice should be applied; these dressings

dressings should be renewed twice a day : and the patient should be enjoined absolute rest. At the same time, attention should be paid to the general disturbance, which the former treatment may have created. Blood should be drawn off from the sanguine ; the feverish heat should be calmed by proper medicines ; the languid and low should be assisted with the bark and cordials ; and ease in the part must, at all events, be obtained by the injection of anodyne clysters of starch and opium.

IF the sinus has not yet been laid open, and the bad state of parts is occasioned by the introduction of tents imbued with escharotics, or by the injection of astringent liquors, (the one for the destruction of callosity, the other for the drying up gleet and humidity) no operation of any kind should be attempted until both the patient and the parts are easy, cool, and quiet : cataplasms, clysters, rest, and proper medicines must procure this ; and when that is accomplished, the operation of dividing the sinus, and (if necessary) of removing a small portion of the ragged edges, may be executed, and will, in all probability, be

be attended with success. On the contrary, if such operation be performed, while the parts are in a state of inflammation, the pain will be great, the sore for several days very troublesome, and the cure prolonged, or retarded, instead of being expedited.

PARTICULAR individual cases may require little particularities, in the treatment; but what I have drawn is the general outline. In this, as in most parts of physic and surgery, the first and great object is, to know what the intention is, which ought to be pursued; when that is clear and determined, a man of any degree of knowledge will seldom be at a loss for materials wherewith to execute it.

ABSCESSSES, and collections of diseased fluids, are frequently formed about the lumbal vertebræ, under the psoas muscle, and near to the os sacrum; in which cases, the said bones are sometimes carious, or otherwise diseased. These sometimes form sinuses, which run down by the side of the rectum, and burst near to the fundament.

THE discharges from these are generally large, foetid, thin, and sharp ; it is, therefore, no wonder, that the sinuses, by which they are made, together with the orifices thereof, become hard and callous ; that is, truly fistulous ; but it must be obvious to every one, who will consider it, that the chirurgic treatment of these sores and sinuses can be of very little consequence towards curing the diseases from whence they arise : their seat is generally out of the reach either of our instruments, or our applications ; and their nature is not frequently found to be capable of being altered by medicine. However that may be, certain it is, that what advantage a person in such circumstances is at all likely to receive, is not derivable from surgery ; but must be from medicine, or from more powerful nature.

PERSONS, who have long laboured under what is commonly called a cachectic habit, have sometimes large collections of matter formed in the cellular membrane within the cavity of the pelvis ; which, like the preceding, form sinuses, and burst their way
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out near the anus. These sinuses, from the nature of the discharge ; from the depth of the seat of the disease ; and from the length of time, which the drain continues, do almost necessarily become fistulous.---Such collections do sometimes prove salutary crises ; though much more frequently they hasten the patient's dissolution : but be the event which it may, although the sore is certainly fistulous, yet can the art of surgery do very little, if any material service. If the event be good, the crisis must be far advanced, and very nearly determined, before any operation, or even dressing (except what is superficial, and merely for the purpose of cleanliness) can be of any use ; and if the discharge proves too much for the strength of the patient, it is pretty clear, that neither the art of surgery, nor indeed any other, can avail him.

ON the other hand, if it so happens, that nature is so powerful, that, by means of this drain, she can free the habit from its former diseased state ; or, if by the help of medicine, such
alteration

alteration can be brought about, the fistula will not prove very troublesome : for the same alteration, at least in some degree, will be found to have been made in that ; and if it be not brought thereby absolutely into a healing state, yet it will be found to be so much altered in its principal circumstances, that the common method, already laid down, will be fully sufficient for the completion of a cure.

WE are, by authors, very frequently advised not to be too hasty in the cure of these cases ; as the continuance of the discharge may prove beneficial to the patient. That these discharges are now and then of great advantage, is beyond all doubt ; but very happily for such patients, the healing or not healing these sores is very seldom within our determination. We may, indeed (and, I fear often do) by indiscreet conduct, prevent a sore from healing, when it is nature's intention that it should be healed ; but when she finds herself relieved, or benefited by a discharge of this kind, she will generally continue it, in spite of
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our most officious endeavours to the contrary.

C A N C E R S and cancerous sores are sometimes formed in the cavity, or in the neighbourhood of the rectum, and fundament: in which they make most terrible havock, and afford most melancholy spectacles.

As I do not know what will cure a cancer, I leave the discussion of this to those who say that they do; most sincerely wishing, that it was in my power to say, that I had, once in my life, known them to have fulfilled their promise.

FISTULOUS sores, sinuses, and induration about the anus, which are consequences of diseases of the neck of the bladder, and urethra, called fistulæ in perineo, require separate, and particular consideration.

IN these the external openings, with the sinuses leading from them into the cellular
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lular membrane, are the least part of the complaint: the stricture in the urethra, the induration of the whole neck of the bladder; the hardened fungous, enlarged, or ulcerated state of the prostate gland; the diseases of the verumontanum, of the vesiculæ seminales, and vasa deferentia, are the great and principal objects of consideration.

A VERY serious consideration, they certainly make. Great and manifold are the miseries which are derived to mankind from these causes; and much more diligent inquiry do they deserve, than they have yet met with: but as they do not immediately belong to my present subject, I must omit, or, at least, to another opportunity defer, entering into them.

F I N I S.

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